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ABSTRACT

This book is designed as a basic text for gaining an understanding of competency-based education. Part one presents an overview of competency-based teacher education focusing in particular on the instructional component. An outline of the general characteristics of competency-based programs is followed by a summary of the social and historical antecedents of the competency-based movement. Part two presents a rationale for the development of the competency-based approach in preservice and inservice programs. Sample module clusters are included. The concluding section examines the future of competency-based teacher education and its potential impact on the profession. (JD)

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COMPETENCY-BASED EDUCATION: TOWARD IMPROVING PATTERNS OF INSTRUCTION

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COMPETENCY-BASED EDUCATION: TOWARD IMPROVING PATTERNS OF INSTRUCTION

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With a Foreword by William L. Smith, Director, Teacher Corps, United States Office of Education and Gwendolyn H. Austin, Competency-Based Teacher Education Coordinator, Teacher Corps.

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CONTENTS

ACKNOWLEDGMENTS

FOREWORD

INTRODUCTION

Part I: An Overview of CBTE

I. COMPETENCY-BASED TEACHER EDUCATION IN CONTEXT
  - Characteristics of Competency-Based Teacher Education Programs
  - Social and Historical Context of CBTE
    - The Ethos of Accountability
    - The Study of Classroom Behavior
    - The Role of the United States Office of Education
    - Rapid Change as a Characteristic of Modern Society

II. COMPETENCY-BASED TEACHER EDUCATION PROGRAMS: TWO CASE STUDIES
  - Weber State College Program
  - University of Georgia Elementary Education CBTE Program
  - Basic Assumptions
  - Faculty Utilization
  - School-University Relationships
  - Management
  - Program Assessment

III. IDENTIFYING BASIC COMPETENCIES: SPECIFYING RELATED OBJECTIVES
  - Identifying Basic Competencies
    - A Research Base
    - In Practice
    - Problems and Issues
  - Specifying Related Objectives

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IV. PROVIDING APPROPRIATE INSTRUCTIONAL ACTIVITIES
  - Problems in the Conceptualization of Learning Activities
  - The Instructional Module
  - The Field Experience Component
  - The Human Relations Component
  - Instructional Resources for Competency-Based Teacher Education Programs

V. EVALUATION AND FEEDBACK
  - Assessment Procedures
    - Assessment of Student Achievement
  - Problems and Issues
    - Performance Criteria
    - Summative Evaluation

VI. TRENDS IN CERTIFICATION RELATED TO CBTE
  - Basic Characteristics
  - Leadership Roles
    - Florida
    - Washington
  - Consortia: Role and Function Under the Washington Plan
    - Who is to be included?
    - Purpose and Function of Participating Agencies
    - In Practice: Certification Under the Consortium Structure

Part II: Illustrative Module Clusters

VII. CBTE: A VIABLE APPROACH TO INSERVICE EDUCATION
  - The School Setting
  - School-College Relationships
  - An Overview of the Keene/Marlborough Instructional Program
  - Barriers to Implementation
  - Guidelines

Illustrative Modules from the Keene/Marlborough Inservice Program
  Improvement of Reading in the Content Areas
    Lillian H. Franc and Glenna J. Mize
  High Incidence Handicaps
    Clyde W. Shepherd

VIII. A RATIONALE FOR THREE PRESERVICE ILLUSTRATIVE MODULE CLUSTERS
  Problems of Third-Year Teachers: A Base for Identifying Competency-Objectives
    A Review of an Exploratory Study of Problems Perceived by Ninety-Two Third-Year Teachers
  Designing and Implementing the Instructional Modules
    The Role of the Classroom Supervising-Cooperating Teacher
    The Role of the Student
    The Role of the College Supervisor

IX. ILLUSTRATIVE MODULE CLUSTER I: DIAGNOSIS IN THE TEACHING OF READING
  Defining Diagnosis
  Informal Observation as a Background for Diagnosis
  The Informal Interview as a Background for Diagnosis
  Pupil Records as a Basis for Diagnosis
  Published Informal Tests as a Basis for Diagnosis
  Informal Teacher-Made Tests as a Basis for Diagnosis
  Standardized Survey Tests as a Basis for Diagnosis
  Standardized Diagnostic Tests as a Basis for Diagnosis

X. ILLUSTRATIVE MODULE CLUSTER II: ADAPTING INSTRUCTION TO INDIVIDUAL DIFFERENCES IN ORAL AND WRITTEN EXPRESSION
    Identifying Individual Differences in Oral and Written Expression
    Providing for Pupil Experience in Creative Writing or Speaking with Differentiated Follow-up
    Providing for Pupil Experiences in Creative Writing or Speaking Using Differentiated Procedures in Teaching Lessons Somewhat Similar in Content to Two Small Groups of Pupils with Varying Backgrounds of Achievement in Written and Oral Expression
    Evaluating Pupils' Oral and Written Expression

XI. ILLUSTRATIVE MODULE CLUSTER III: ON EXPLAINING, A TEACHING STRATEGY IN THE SOCIAL STUDIES
    Engendering Comprehension of Key Terms or Concepts
    Engendering Comprehension of Concepts Related to the Development of Map and Globe Skills
    Engendering Comprehension of Concepts Related to the Interpretation of Graphic Materials
    Engendering Comprehension of a Generalization Related to the Ongoing Social Studies Program

Part III: Future Impact

XII. FOCUS ON THE FUTURE
  - Expanding Conceptions of CBE: Linkage to Areas other than Preservice Teacher Education
    - Linkage to Liberal Arts Programs
    - Linkage to Inservice Education
    - Linkage to Secondary and Elementary Curricula
  - Research in CBE
    - Linkage of Teaching Behavior to Student Learning
    - Designing and Conducting Research in Teacher Effectiveness
    - Models of Teaching
    - The Role of the Teacher
    - Curricula and Curricular Materials
    - Specific Pupil Performances
  - Future Areas of Emphasis
    - The Study of Models of Teaching
    - The Role of Consortia and Advisory Committees
    - Issues in Teacher Certification
  - Is CBTE a Transitional Model?

APPENDIX A: GLOSSARY OF TERMS

ACKNOWLEDGMENTS

It is not possible to acknowledge individually the contributions of all the various persons who helped to bring this book to fruition. However, I would like to express my appreciation to William L. Smith, Director, Teacher Corps, U. S. Office of Education, Washington, D.C., who followed manuscript development through to publication, to Gwendolyn H. Austin, Program Specialist, U. S. Office of Education, Teacher Corps, Washington, D.C., who read the entire manuscript and gave specific suggestions which ultimately were incorporated into the final manuscript, and to Wesley Brown, Director of the Keene State College/Marlborough School District Teacher Corps Project who saw the potential in CBTE as a viable approach to both inservice and preservice teacher education programs.

In addition, I wish to acknowledge the special contributions of two of my colleagues in the Department of Education, Keene State College, Keene, New Hampshire, Glenna J. Mize and Clyde W. Shepherd. Two illustrative module clusters presented in Chapter VII are an outgrowth of their work with the Keene State College/Marlborough Schools Teacher Corps Project.

INTRODUCTION

This book conceived as a basic text for persons interested in gaining an understanding of competency-based education stems in part from personal experiences in the design and implementation of competency-based instructional modules in preservice and inservice teacher education programs.

Part I of the book presents an overview of competency-based teacher education focusing in particular on the instructional component. An outline of the general characteristics of competency-based teacher education programs is followed by a summary of the social and historical antecedents of the competency-based movement. A case study of two competency-based teacher education programs in operation details both the preoperational and operational stages of program development. Issues related to identifying basic competencies, specifying related objectives, providing for instructional activities, and designing assessment procedures are considered. Evolving patterns of teacher certification related to competency-based education are reviewed.

Part II describes the use of competency-based modules as components of the inservice instructional program related to the Keene State/Marlborough Teacher Corps Project, a demonstration project working with both elementary and secondary school teachers. It also presents a rationale for the development of the competency-based approach in a preservice program for elementary school interns. Sample module clusters from both programs are included.

The concluding section, Part III, examines the future of competency-based teacher education and its potential impact on the profession.

FOREWORD

Teacher Corps' long history of commitment to and involvement in the Competency-Based Teacher Education (CBTE) movement is a matter of record. It began in 1970 when Teacher Corps field-tested the pilot competency-based components at seven project sites. This joint venture between the Bureau of Research and Teacher Corps represented the coming together of research and practice. The Bureau of Research provided funds for a half-time position in the seven Teacher Corps CBTE project sites, designated as the Program Development Specialist. The responsibility of this specialist was to develop the CBTE component in the institution of higher education.

Our move toward CBTE, however, extended beyond the CBTE pilot project sites. In fact, all 5th Cycle Teacher Corps projects (1970-72) were required to identify specific competencies the school districts desired in the teachers who worked with children from low-income families. In addition, high priority was given to funding those institutions willing to begin the difficult process of specifying performance competencies as equivalents to the university's traditionally approved program of teacher certification.

By the end of 1974 it had become increasingly clear that a majority of the institutions of higher education could not or would not make the necessary commitment required to carry out a comprehensive CBTE program. Further, the body of evidence gleaned from the five years of Teacher Corps project experiences indicated the need to see CBTE as a viable option in teacher education but not as an only option. Some institutions were ready, willing and able but as the American Association of Colleges for Teacher Education's PBTE reports point out, they were but a handful. The resource costs—fiscal, material, human—were much greater than most had anticipated. At the same time other cost effective alternatives were being explored.

In 1975, therefore, Teacher Corps broadened the options for local projects to include, in addition to CBTE, (1) the development of training complexes, (2) the development of training programs for alternative schools, (3) training based on the adaptation of research findings and (4) programs of interdisciplinary training.

Teacher Corps' emphasis on CBTE has resulted in many interns and teachers being trained on-site to develop teaching competencies through performance criteria in the real world setting—the classroom. Today, the CBTE movement itself continues to be a very vital part of many university programs although it does not receive as much fanfare and publicity that it once did. The concept appears to have enjoyed great transportability into diverse areas such as dentistry, law, medicine, public administration and vocational education, to name a few. More important, the CBTE concept has now been extended into instructional programs for elementary and secondary students under such titles as Competency-Based Education (CBE), or Competency-Based Instruction (CBI) or Minimal Competency Testing Programs.

As of March, 1978, thirty-three states had taken some type of action toward mandating the setting of minimum competency standards for elementary and secondary students.

As this trend toward transporting the CBTE approach into the instructional program of local school districts continues, the institutions of higher education must be prepared to assist in training education personnel to utilize this approach. The author of this document is to be commended for her insightful handling of CBTE in transition.

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Washington, D.C.
June, 1978

PART I

An Overview of CBTE

14

CHAPTER I

COMPETENCY-BASED TEACHER EDUCATION IN CONTEXT

— I —

COMPETENCY-BASED TEACHER EDUCATION IN CONTEXT

In a discussion of current trends in teacher education, Cooper and Sadker note that competency or performance-based teacher education programs gained many advocates during the early years of the seventies.[1] Yet in an overview of problems related to the implementation of competency/performance-based programs William L. Smith states that no two educators seem able to agree as to just what competency/performance-based teacher education is all about.[2] In an effort to clarify such basic issues, and to identify both problems and prospects regarding competency/performance-based teacher education, the American Association of Colleges for Teacher Education together with the Eric Clearinghouse on Teacher Education published a series of monographs focused upon a critical analysis of the competency/performance-based education movement.

It is to be noted that for the most part the terms competency-based and performance-based are used interchangeably in this Performance-Based Teacher Education series (PBTE) published between 1971 and 1977. However, Lindsey proposes the use of the term competency-based rather than performance-based teacher education arguing that the term competency provides for more adequate language with competency defined to include performance, knowledge, and values. Throughout this book the term competency-based rather than performance-based will be used with competency defined as proposed by Lindsey.[3]

CHARACTERISTICS OF COMPETENCY-BASED TEACHER EDUCATION PROGRAMS

Characteristics of competency-based teacher education programs are outlined in several publications of the PBTE Series as well as in other current professional literature. There is general agreement that essential elements of a competency-based teacher education program include the following:

(1) Teaching competencies to be demonstrated are usually derived from conceptions of teacher roles.

(2) Teaching competencies to be demonstrated are made public in advance and are stated so as to make possible assessment of the student's attainment in relation to specified competencies.

(3) Criteria for assessment of competencies are stated in terms of expected levels of accomplishment under specified conditions.

(4) Assessment procedures focus on demonstrated competency.

(5) Student progress and completion of the program is based on demonstrated competency.[4]

In addition to the above basic characteristics, implied and related characteristics are frequently identified as components of competency-based teacher education programs. Individualization or personalization of instruction is associated almost universally with competency-based programs. Time is a variable. Progress is further personalized when each student has some choice in the selection of objectives and learning experiences. Houston and Howsam caution, however, that all instruction is not necessarily oriented toward independent activities and that group and even mass instructional processes are viable alternatives.[5]

Modular packaging of instructional units as an effective means of individualization of instructional activities is yet another supplementary characteristic of competency-based teacher education programs. A module is here defined as a set of learning activities focused upon a specific element of teaching or teaching task whose end product is teaching competency. Clarke describes the standard format for instructional modules to include objectives, prerequisites, experience, setting, materials, level, hours and evaluation.[6] In practice considerable variation in the structure of instructional modules is evidenced.

However, it is generally agreed that modularization increases the possibility of personalization and individualization of instruction and permits more precise focus on the development of specific competencies. Chapter IV will discuss more fully the development of modular instructional material.

As programs develop, in order to provide alternative paths of instruction, a wide variety of instructional resources including such new technologies and techniques as video and audio recorders and computer assisted instruction, are generally made available to participating students.

For the most part competency-based programs are involved with the professional component of the preservice teacher education program to the exclusion of general education and other disciplines.

Because of the heavy emphasis on performance in the teaching role and assessment of competencies involving pupils, much competency-based preparation is carried on in a field setting. Programs may be field oriented with theory input provided for in a campus setting and correlated with field experiences or a program may be more completely field based with provision for theory input at the site where the field experiences occur. Involvement with school settings generally leads to the development of a broad base for decision making by college/university faculty, students and public school personnel.

Ongoing evaluation and feedback as guidance of individual learning experiences are also generally components of competency-based programs. Feedback may involve student self-evaluation or may consist of seeing, hearing, or feeling how others react to one's performance.

In contrast to the more traditional entrance, course completion, student teaching requirements, emphasis on exit requirements and the acquiring of the specified competencies with greater flexibility in entrance requirements is also associated with competency-based teacher education programs.

Preparation for a professional role is viewed as continuing throughout a career and encompasses both preservice and inservice teaching. Finally teaching is viewed as capable of being understood and trained for with generic qualities of teaching identified. Ideally, a research component is built into the program.

SOCIAL AND HISTORICAL CONTEXT OF CBTE

Roots of the CBTE movement are deeply enmeshed in the widespread demand for improved educational opportunity for all children including children from varying socio-economic and ethnic backgrounds. If the preparation of teachers were improved, ultimately the educational opportunities of the children they serve should also improve—so reason the critics. Behind this premise one can identify a number of social and historical antecedents that have given impetus to the development of CBTE and have helped to shape the movement as it is manifested in it's present form. Among these antecedents are (1) the ethos of accountability, (2) the research study of classroom behavior, (3) the role of the United States Office of Education, and (4) rapid change as a characteristic of modern society. Each of the above factors will be considered briefly as it relates to the beginnings of the CBTE movement.

The Ethos of Accountability

In a discussion of the current press for accountability, DeNovellis and Lewis differentiate between program accountability, fiscal accountability and instructional accountability. As defined by these authors, program accountability refers to comprehensive program evaluation, fiscal accountability refers to the planning and accounting for monies provided for school districts, while instructional accountability although heavily influenced by both program and fiscal accountability, refers to accounting for the success or failure of the school to provide the student with the capabilities needed to take his place in the mainstream of society—in short to be given a chance for occupational success and personal fulfillment.[7] The emergence of CBTE is most intimately linked with instructional accountability. As promises for reform in education in the sixties, especially as coupled with large scale federally funded education programs, failed to meet the expectations of the poor blame for student failure in the schools shifted to the position that if a child failed it was the fault of the teacher. The teacher was to be held accountable for pupil progress. In turn, teacher preparation institutions were to be held accountable for preparing teachers who, by reason of adequate preparation, could legitimately be held accountable for the accomplishments of their students. From its earliest beginnings CBTE programs have focused on the development of teaching competencies related to specified objectives with demonstrable outcomes—teaching competencies identified as crucial to the development of pupil learnings.

The Study of Classroom Behavior

In the early sixties a growing body of research concerned with the descriptive analysis of classroom behaviors gained national visibility. Thus in 1962 the Department of Curriculum and Teaching, Teachers College, Columbia University sponsored two conferences at which researchers engaged in studies of classroom behavior were invited to present papers "setting forth the conceptual framework within which their studies were planned and carried out."[8] The following year the *Handbook of Research on Teaching* published in 1963 included more than eighty pages of discussion concerned with the measurement of classroom behavior by systematic observation.[9] Eventually attention began to be given to the analysis of classroom behaviors as a basis for preparation of prospective teachers. It was hoped that such analysis, usually used in conjunction with video and/or tape recorders, would help the teacher candidate in the analysis of his own teaching behavior and so provide for greater insight and understanding of teaching. By the mid-sixties practice in the use of various systems of analysis had been incorporated into the experiences provided in teacher education at such institutions as Teachers College, Columbia University, Temple University, and Stanford University. As the CBTE movement emerged analysis of teaching became an integral part of the preservice programs. In a comparative description of fifteen competency-based teacher education programs initiated between 1967 and 1970 Elfenbein reports that most of the programs stress self-analysis of teaching through the use of some analytic scheme. Several use the Flanders Interaction Analysis while others have developed or are in the process of developing original systems for observation and analysis of teaching.[10] Thus while schemes for the analysis of teaching were used as elements of teacher preparation programs by a limited number of institutions prior to the development of CBTE programs, analysis of classroom behavior became a basic instructional strategy in the evolving competency-based programs.

The Role of the United States Office of Education

In an address delivered in August 1967, Harold Howe II, United States Commissioner of Education emphasized the changing role of the federal government in education and stated, "Congress and the Administration are using education as a tool for working on important national problems; to combat poverty and unemployment; to reverse the decline of our cities; to improve our abilities to handle international responsibilities . . . ; to maintain the pace of our national life through support of artists and scholars . . . ".[11] This statement reflected the growing national concern and awareness of the importance of education for the individual and for the individual in community—local, state, national and international. In the late fifties and early sixties, however, programs for teacher education funded through federal appropriations were implemented largely through various teacher institutes and fellowships. Criticism concerning the lack of coordination of effort among these isolated and unrelated programs may have been a factor in the United States Office of Education's move to award grants for the development of models for new programs in teacher education. Nine such designs, the Comprehensive Elementary Teacher Preparation Models, were funded under a grant from the National Center for Educational Research, United States Office of Education. An additional model program (University of Wisconsin) was funded the following year during Phase II of the project. Relatively independently the funded models presented designs in which teaching competencies related to specified objectives and stated outcomes were basic elements. The model programs became points of reference—blueprints for the evolving CBTE programs many of which were then in the preoperational or initial implementation stage. Further, in describing fifteen CBTE programs, Elfenbein states, "In all but two of the programs there was some indication of support from government authorities, either in funding or in the provision of technical assistance in the form of consultants, materials and also physical plant facilities."[12] It is interesting to note that nine National Competency-Based Education Centers were established as outgrowths of competency-based education concepts developed under the grants for the Comprehensive Elementary Teacher Preparation Models. These centers originally in operation at nine universities were established to provide development assistance and training services for persons interested in the implementation of competency-based education programs.[13]

Rapid Change as a Characteristic of Modern Society

" . . . the final qualitative difference between this and all previous lifetimes is the one most easily overlooked. For we have not merely extended the scope and scale of change, we have radically altered its pace. We have in our time released a totally new social force—a stream of change so accelerated that it influences our sense of time, revolutionizes the tempo of daily life, and effects the very way we 'feel' the world around us."—so writes Toffler in his opening chapter of *Future Shock*.[14] Education and teacher education have not remained untouched by the rapid changes faced by our society. Emerging CBTE programs are in part an effort to meet the challenge of change and thus to respond to developments in our society. The focus on "lead" rather than "lag" is evidenced in program planning. Attention is being given to teacher roles in learning settings projected to a decade ahead and beyond. There is conscious effort to think in terms of preparing the teacher candidate to cope with change itself and at the same time to act as an agent of change.

The prospective teacher is given many opportunities to make decisions concerning his/her own learning. Efforts are made to personalize each student's educational program in terms of goals, learning style and rate of advancement thus providing for personal choice and personal responsibility for one's own learning.

Much has been said in educational circles about the unreality of teacher preparation with respect to the schism between theory and practice and the consequent lack of preparedness of beginning teachers to cope with the changing realities of the classroom. However, most CBTE programs are field oriented or field based. Students are given opportunities to develop competencies in problem solving skills, devising and testing solutions in the classroom setting and using theory as it applies to the real-life situation.

Finally with respect to coping with change it is important to note that a built-in flexibility related at least in part to the continuous assessment and subsequent revision of various units of the instructional program appears to be an aspect of CBTE that points to the possibility that such programs can and will continue to be responsive to change both in our schools and in our society at large.

The primary focus of this book will be the instructional component of CBTE programs with special emphasis on the development of modular materials. In addition to the two case studies of CBTE programs presented in the following chapter, Part I of this book will consider the following major elements of the module (1) teaching competencies (2) instructional objectives (3) learning experiences and (4) assessment procedures. Each modular element will be considered within the larger framework of the CBTE movement. Each will be linked to current research. Each will be discussed with respect to its problems and its potential.

Part II will include original sample modules from both inservice and preservice teacher education programs. Throughout the book program management, governance, and evaluation will be discussed only as they relate to the instructional aspects of CBTE programs.

Part III will focus on the future potential of CBTE.

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3. Lindsey, Margaret. "Performance-Based Teacher Education: Examination of a Slogan," *Journal of Teacher Education* XXIV: 3 (Fall 1973) pp. 180-186.
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CHAPTER II

COMPETENCY-BASED TEACHER EDUCATION PROGRAMS: TWO CASE STUDIES

— II —

COMPETENCY-BASED TEACHER EDUCATION PROGRAMS: TWO CASE STUDIES

Two case studies of CBTE programs both in operation for several years will be presented in this chapter: The Individualized Competency-Based System of Teacher Education at Weber State College, Ogden, Utah and the competency-based teacher education program at the University of Georgia. An overview of each program will be followed by a discussion of basic assumptions, faculty utilization, school-university relationships, management and program assessment. These programs were reported as having the largest student enrollment among the fifteen programs described by Elfenbein.[1] They are representative of programs which evolved in somewhat different settings at about the same time and became operational in the Fall of 1970.

WEBER STATE COLLEGE PROGRAM

The Weber State College education faculty attribute their initial interest and later commitment to a total competency-based program to a self evaluation undertaken in relation to NCATE accreditation during the autumn of 1966.

With a total enrollment of approximately 8,000 students with about 200-300 students certified in elementary and secondary education each year, Weber State College has moved into a total competency-based teacher education program for the preparation of both elementary and secondary school teachers. The program is limited to the junior and senior year and involves a teacher education faculty of fifteen.

The faculty's first written statement concerning the development of the CBTE program appeared in April 1968 under the title, "A Proposal for the Revision of the Teacher Education Curriculum." Several revisions followed. At about this time a project director as well as a board of control was designated. The board of control was to be composed of the director, the chairman of elementary education, the chairman of secondary education and the dean of the school of education.

Early in autumn of 1968 funding for a feasibility study became available through a grant of $5,000 from the Carnegie Corporation of New York. This was the first of two grants obtained from this private institution. The second grant of $195,400 allowed the faculty to hire replacements for seven months while the fifteen member regular education faculty planned the CBTE program. During this period faculty members developed individual instructional modules, revised the usual grading system for a credit-no-credit arrangement, developed a human relations component for the new program and formed new arrangements with the public schools. In addition student reaction to the new conceptualization of the teacher education program was solicited. Response was generally positive. This primary development period covered three quarters, the winter, spring and summer of 1970. During this process of change each teacher education faculty member analyzed his own courses and selected out those concepts, skills, attitudes and understandings he considered essential to the preparation of a teacher. Efforts of individual faculty members were reviewed by the total faculty. Assistance from public school personnel came through an ad hoc committee of sixteen public school administrators, teachers and college students who identified additional topics to be considered. This committee, sponsored by the Utah Department of Public Instruction, the Ogden and Davis School Districts, and the College was involved in a project concerned with preparation of teacher aides and met regularly with the faculty over a two-month period. Competencies and topics identified as essential were then converted into objectives stated in behavioral terms. At this stage consultant help was made available to the faculty through the Diversified Systems Corporation

(EPIC) specialists in the development of objectives and evaluation. Their help was continued as the faculty moved into the conceptualization of modularized instructional units.[2]

As instructional modules were developed based on selected competencies several modules topically related were combined to form one Weber Individualized Learning Kit (WILKIT). Eighty-five WILKITS form the core of the instructional program for both elementary and secondary teacher education students. Approximately one-half of the WILKITS are program requirements with some choice available to students as to which others are carried through. Course blocks developed from related WILKITS helped to order experiences and to avoid duplication of topics at Weber State.

The human relations component of the program became an important part of the instructional sequence. Ability to become a facilitator within a learning environment appeared to program planners to be fundamantal to the professional development of the prospective teacher. Because of the Carnegie Foundation grant, Weber State College was able to call upon the Thiokol Chemical Corporation as consultants in the development of a Human Relations Laboratory to be used in the teacher preparation program. Communication exercises related to the communication process in a classroom setting, group discussion focused on the understanding of group process, interpersonal skills, activities and professional problem solving are included in experiences for students in the human relations component.[3] In addition a number of the WILKIT instructional modules such as "Group Processes" and "Tutoring Techniques" relate to and support the work of the interaction laboratory. The laboratory program designed for approximately fifteen students, a trainer, and co-trainer is scheduled daily for one and one-half hour sessions for six weeks or for two sessions of an hour and one-half daily for three weeks. The main focus of the program is to help prospective teachers to gain a greater understanding and appreciation of themselves and of others.

At Weber State College a major effort is also being put into the development of a practicum center approach to student teaching as one of several alternative student teaching arrangements available to prospective teachers. At the practicum center three or more student teachers work with a master teacher, at least one other certified teacher, and eighty to one hundred children. The master teacher provides leadership for the team and helps each member to work cooperatively in the planning and implementation of learning experiences for children. Program planners believe the practicum arrangement offers a student greater opportunity to observe and gain experience in a variety of teaching models, provides directed experiences in systematic planning and gives a student a maximum of teaching time. The practicum requires a full commitment on the part of the student for a college term. During this time students also complete three or four related modular units such as "Classroom Management" and "Teaching and Learning in Three Domains." Following the student teaching sequence the CBTE preservice program offers a series of WILKITS focusing on the synthesis of the entire program. Included in this block are units dealing with professional rights and responsibilities. In addition, an opportunity is given for a leadership or service practicum and time is made available for prescribed remediation or optional WILKITS.[4]

UNIVERSITY OF GEORGIA ELEMENTARY EDUCATION CBTE PROGRAM

The University of Georgia, also a state university has an enrollment of approximately 19,000 students with over 1,000 elementary education undergraduates, one-half of whom are enrolled in some phase of the competency-based teacher education sequence. This two and one-half year program is open to students at the end of the first half of their sophomore year.

Beginnings at the University of Georgia are traced to the spring of 1968 when faculty were involved in the development of a model for the preparation of elementary school teachers, one of nine such projects funded by the United States Office of Education.[5] With funding provided through this grant the Georgia faculty had approximately two and one-half years to plan and to think through the development of their program. During the preparation of the education model specifications, faculty members outlined program goals, specified faculty requirements and staff utilization, developed the instructional and evaluation component and outlined program management. Their progress was reported in several documents among them the *Georgia Educational Model Specifications for the Preparation of Elementary Teachers*, 1968 and the follow-up feasibility study completed in 1970.[6,7]

Identification of teaching competencies received high priority as an initial step in the development of the Georgia program. As a result, the derivation of teaching competencies to be included in the CBTE was approached from several perspectives: (1) an analysis of course requirements similar to that undertaken by the Weber State College faculty (2) a review of what pupils should learn with inference as to what teachers should know and (3) speculation as to what an effective teacher does and is as perceived by public school personnel and by university faculty and students. Competencies were then conceptualized in terms of knowledge, attitudes, and personal characteristics and broadly classified as either generic or enabling. As defined by Shearron and Johnson generic competencies are those generally applicable to all teaching, readily observable and include both the performance of teaching tasks and affective behaviors. Enabling competencies are those intended to aid the student in developing a generic competency and may include knowledge of subject matter, philosophic rationales, problem solving skills, decision making, self understanding and knowledge about the teaching process. Twenty-five to thirty generic competencies form the nucleus of the Georgia program and all students are expected to demonstrate proficiency in most of them.[8]

Modular units similar to those prepared at Weber State College were specifically developed for the Georgia program and at this institution also became major vehicles for instruction in the CBTE program. The Georgia program differentiates, however, between modular instruction as a teaching strategy and instructional modules as learning packets reflective of this teaching strategy. Further, the Georgia faculty believed that modular instruction could be carried on with or without the use of self contained learning packets as major delivery systems for such teaching. Elements included, however, in the modular instructional strategy and in the modular learning packets at the University of Georgia are similar to those that make up the Weber State instructional modules. Thus Georgia modular instructional strategy, Georgia instruction modules, and Weber State WILKITS share the following elements in common: (1) objectives related to teaching competencies and usually stated in behavioral terms (2) preassessment of the learner with respect to the given objectives (3) selected learning experiences focused on attaining an objective (4) assessment to determine if the instructional objective has been met. Under the Georgia plan instructional modules are most often used to develop enabling competencies. Generic competencies are usually developed in a sequence that provides for (1) knowledge about a teaching competency (2) practice through similation (3) practice in unstructured educational settings involving pupils and (4) practice in structured educational settings involving pupils.

Learning activities within modular units are similar for both universities and may include such experiences as reading, participation in seminars, preparation of instructional aids, viewing of films, micro-teaching, observing, tutoring, analysis of teaching, and the development of instructional modules for the student's own pupils. Learning experience may take place in a variety of situations and locations, on campus, in schools, in community agencies.

In the assessment of competencies an effort is made to determine if in carrying out the suggested learning experiences the objective of a given module has been attained. At the University of Georgia assessment of generic competencies follows a five point plan parallel to the sequential steps outlined for carrying out related learning activities. Included in this process are the following: (1) Evaluation of knowledge about the competency. This may be a paper and pencil test and usually is evaluated by the student and by university faculty. (2) Evaluation of the demonstrated competence through observation in simulated settings. Here evaluation is carried out by self, peers, and university faculty. (3) Evaluation by observation in a structured situation with pupils and assessment by self, peers, university faculty and public school personnel. (4) The fourth evaluative procedure is somewhat similar to number three above except that the demonstration takes place with pupils in an unstructured teaching-learning setting. Enabling competencies which for the most part are the outgrowth of course outlines translated into a competency approach often used the more traditional assessment procedures such as pencil and paper tests and personal interviews. It is interesting to note that in the Georgia CBTE model a fifth point at which evaluation is indicated in the assessment of competency, namely assessment through process-product results or pupil learnings, is at this time not generally used in the preservice program. For the prospective teacher attempting to demonstrate competence in unstructured classroom settings too many variables such as pupil scholastic background, pupil attitude toward school and previous pupil experience with college students assisting in the classroom, make competency assessment extremely difficult.

At the University of Georgia the human relations instructional component is somewhat similar to the human relations laboratory experiences provided through the Weber State College program. However training sessions center upon the development of the helping relationship.[9] Students are preassessed on both a discriminative and a communicative index to determine their "helping" level using a scale of one through five with five being the most helpful, one harmful and three minimally helpful. It is hoped that through training the student will move up the scale toward a five. Sessions totaling 50 to 100 hours are spread out over a period of two years. They include opportunities to explore one's own feeling, values, and attitudes and are carried through by a facilitator trainer usually with a group of not more than ten students.

BASIC ASSUMPTIONS

Both Weber State College and University of Georgia faculty identified several philosophic assumptions as basic to the CBTE programs. These are here presented in somewhat parallel listings.[10,11]

WEBER STATE COLLEGE	UNIVERSITY OF GEORGIA
Teaching Competencies	
Teacher preparation should develop in teacher candidates the competencies characteristic of successful teaching.	Most of the competencies needed by teachers can be identified and assessed.
Accountability	
Teacher preparation should be a shared responsibility of the total educational system. Teacher preparation should be held accountable for the success of its practices. Teacher preparation should place responsibility on the student for his own progress and accomplishments.	Teacher education is a joint responsibility of the public schools, state education agency, and teacher preparation institutions. All persons concerned including students should have a voice in determining all aspects of the program.

Relating Theory and Practice

Teacher preparation should make extensive use of meaningful field experiences. Teacher preparation should demonstrate theory in practice.	Teacher education should be field centered, affording many opportunities to work with real pupils.

Teaching Models

Teacher preparation should demonstrate a variety of effective teaching models.	A teacher education program should serve as a model for effective teaching.

In addition the Weber State College program specified that teacher preparation should:

(1) be academically respectable and appeal to the scholarly
(2) allow for a variety of student and faculty needs
(3) be based on skills of effective human interaction
(4) be readily adaptable to need for change, and
(5) utilize technological aids to learning.

Further, the University of Georgia program conceptualizes the effective teacher as "one who knows who he is and why he believes as he does."[12] In both programs the assumptions outlined above serve to give direction to the ongoing implementation of the CBTE programs.

FACULTY UTILIZATION

Faculty roles at both Weber State College and Georgia University have changed for those persons involved in the CBTE programs. No longer do classes follow primarily a lecture-discussion format. Instead the two CBTE programs provide more opportunities for faculty members to serve as facilitators of learning and of group process. Faculty-student contact is often on a one to one or small group basis.

As the CBTE program became operational at Weber State College, adjustment in faculty office time to twice the amount of time usually scheduled for classes helped to give students needed time for faculty contact. Faculty members are available to students for specific purposes built into the modules and for assistance in the assessment of their own competencies. In addition faculty members are the determiners of competency upon the completion of modules, serve the practicum centers as consultants and continue to engage in the revision of modular instructional material. Follow up of Weber State College graduates was initiated on a limited basis in the autumn of 1971 with college faculty assuming responsibility for the supervision of eighteen beginning teachers. Thus the Weber State College CBTE faculty moved into new roles at both the preservice and inservice levels.

At the University of Georgia faculty members work in operational teams. Members of a given team may include:

The principal and selected faculty from cooperating schools.

Sixty students at varying levels of development in the CBTE program.

The team leader—a member of the college faculty devoting full time to this position.

Several members of the faculty who are educational specialists (social science, science, math etc.)—each 1/3 time.

One counselor—1/2 time.

One educational psychologist—1/2 time.[13]

Each team may have some students on campus acquiring enabling competencies while others are in schools demonstrating competencies or gaining background experience. A faculty member may be at the campus or at a cooperating school on any given day. At the college various learning centers or open laboratories provide students with needed materials and resources to acquire enabling competencies. Here faculty and teaching assistants are available to give guidance and support to the student as he carries out the various independent modular units.

A team governance committee composed of representatives from the students, the public school staff, and university faculty members has significant decision-making power within the team with respect to instruction. This committee is charged with the assessment of competence, the allotment of time, and the determination of instructional priorities. Within the team structure it also carries out the ongoing assessment of the program. The university counselor assigned to the team assists with personal problems and the resolution of team conflicts.

SCHOOL-UNIVERSITY RELATIONSHIPS

As noted in the previous discussion of faculty utilization new school-university relationships are generating new linkages between the schools and the university.

At Weber State College the practicum center program for student teaching places increased responsibility for the professional growth of student teachers on master teachers at the centers with college faculty serving as consultants. Further, the follow-up study involving supervision of beginning teachers, graduates of the CBTE program, was developed cooperatively by the College, the Ogden School District, the Weber County School district, and the Utah Department of Public Instruction.

At Georgia State the governance committee for each school-university team made up of representatives from both the school and the university is involved in meaningful decision making with respect to the instructional program as it is implemented through any given team. Faculty in the Georgia CBTE program are at present associated with 14 portal schools. A portal school is one of several schools within a school district that has developed a working relationship with the university with respect to the education of teachers and has identified as a secondary goal within that relationship the improvement of educational opportunities for pupils who attend these schools.[14]

Thus, in the development of the two CBTE programs the need for collaborative effort has resulted in new school-university relationships—dynamic relationships in a continuing process of change.

MANAGEMENT

The fact that both CBTE programs under discussion are in a formative stage is reflected in program management which also is emerging in process. However within the CBTE movement efforts to conceptualize administrative function and structure to promote and enhance CBTE programs are underway.

The Weber State College CBTE program is supported by an operations center whose staff has a variety of management and administrative duties. Among their responsibilities are the following:

1. Maintaining and disseminating WILKIT materials.
2. Scheduling conferences, seminars, and lectures.
3. Scheduling microteaching and assessment conferences.
4. Administering objective tests for pre- and post-assessment.
5. Maintaining student progress records.

At present, Georgia University program management is centered in the individual team governance committees described earlier in this chapter. In addition to the responsibilities related directly to instruction the committee also evaluates the program as it is mediated through any given team. Directors of the CBTE program at the University of Georgia believe that management by teams promotes the possibility of humanizing teacher education particularly as it provides for (1) a supportive relationship among students and between students and faculty, (2) curriculum building which can focus on the needs of a particular group, (3) a close counseling relationship that can more adequately personalize a teacher education program, and (4) a broad base for meaningful decision-making.

PROGRAM ASSESSMENT

Faculties involved in the two CBTE programs are well aware of the crucial need for both ongoing assessment on a day-to-day basis and for overall systematic program evaluation. More adequate evaluative procedures are in process of being developed for both programs.

At Weber State College grant funding supported an evaluation specialist over a one year period (1970-71). This initial assessment focused on the appropriateness and effectiveness of the WILKIT units. Data gathered through an evaluative questionnaire administered to the student at the completion of each WILKIT was summarized and then used by faculty members to carry out revision of instructional materials. At the end of the first year every WILKIT in the system had been revised. Changes involved deleting and adjusting learning experiences, clarifying instructions and replacing materials. Scheduling procedures were also adjusted and facilitated as a two hour daily time block for professional studies was instituted as a requirement for CBTE students.

At present the University of Georgia governance committees within individual instructional teams carry the responsibility for the evaluation of the program as it functions within any given team. Intensive evaluation of the entire program has not been carried out at either the University of Georgia or Weber State College. That it is a need and one that should continue to receive high priority in future planning is not questioned.

In conclusion, it is interesting to note that in 1971, one year after moving into full operation the Weber State College CBTE program was selected for the Distinguished Achievement Award by the American Association of Colleges for Teacher Education.

The following chapter is concerned with the identification of teaching competencies and the conceptualization of related objectives, essential steps in planning the instructional component of CBTE programs.

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CHAPTER III

IDENTIFYING BASIC COMPETENCIES: SPECIFYING RELATED OBJECTIVES

— III —

IDENTIFYING BASIC COMPETENCIES: SPECIFYING RELATED OBJECTIVES

Over the years much has been written about teacher effectiveness and teacher competence. It has been assumed that the effective teacher is one whose teaching affects his student toward positive change and that the competent teacher is also one who moves his student in the direction of positive change. Thus the terms competence and effectiveness are frequently used interchangeably in the literature with respect to the teacher's classroom behaviors and teacher education programs.

IDENTIFYING BASIC COMPETENCIES

From their inception teacher preparation institutions have had as their reason for being the development of effective-competent teachers. Yet the crucial question as to just what teaching competencies are needed by the effective teacher remains largely unanswered. Nevertheless, during the past two decades this basic question has continued to receive attention from both teacher educators and educational researchers. In the literature on teaching and teacher education, concern for a theory of teaching, development of taxonomies of teaching, statements from both the psychology and the philosophy of teaching continue to be part of a persistent search for alternative approaches to the question of what teaching behaviors lead to effective-competent teaching. Each of these approaches is significant in that it contributes to a broad perspective from which to view teaching and the preparation of teachers. However, none can serve alone as a sound basis for selecting out those teaching competencies most crucial to promoting pupil learning. Concepts, theories, and hypotheses about teaching skills necessary to produce desireable changes in pupils are largely empirically untested. Yet such conceptualizations serve to provide a basis for reasoned analysis of teaching behaviors which in turn continue to spark the research needed to identify the competencies most essential to effective teaching.

A Research Base

Two major lines of inquiry are apparent in recent research on teacher performance: (1) descriptive classroom studies and (2) correlational studies of the relationship between specific teaching behavior and student achievement. A prolific line of research has resulted from descriptive studies of the way teaching is actually carried on in the classroom. With respect to such studies B. Othanel Smith states, "All sorts of dissections of teaching behavior have been made since the closing years of the 1940's. . . . We have witnessed the analysis of teaching behavior into emotional, cognitive, and other psychological categories as well as into logical, pedagogical, linguistic and social categories."[1] Among the more recent major contributions in this area are the studies of Hughes, 1962; Gallagher and Aschner, 1963; Perkins, 1964; Bellack et al., 1966; and Furst and Amidon, 1967.[2,3,4,5,6]

However, findings from such studies, while contributing to the description of the "way teaching is," yield very little about the relationship between classroom teaching behavior and student gains. Thus, while insights into teaching are inferred from descriptive studies, little if any direct guidance in the identification of teaching competencies to be included in teacher education programs is available from these sources.

Correlational studies, also referred to as process-product studies, form a second major line of inquiry into teaching performance. These studies focus on teaching behaviors and their relationship to student achievement and appear to be potentially more fruitful for the identification of basic teaching competencies. In his book, *Teaching Behaviours and Student Achievement,* Rosenshine summarizes the findings of fifty process-product studies dealing with forty different dimensions of teaching behavior. He reports that of the variables investigated five which yielded the strongest relationships with measures of student achievement are clarity, variability (defined as use of variety), enthusiasm, task oriented teaching behaviors, and student opportunity to learn the criterion material.[7] Yet, efforts to synthesize related studies of specific teaching behavior variables such as clarity or enthusiasm, for example, again yield little if any precise information of value to teacher educators striving to identify teaching competencies to be included in a CBTE program. Indeed, Rosenshine and Furst in a discussion of research on teacher performance criteria acknowledge that sufficient information is not available on the relationship between a teacher's behavior and student learning in the classroom to design adequate programs in teacher education.[8] One might ask then, given such a thin research base, how are competencies included in various ongoing CBTE programs initially identified?

In Practice

Given the complexity of teaching, the thin research base and the need for lead in the planning of teacher education programs, program planners face enormous difficulties in their efforts to identify crucial teaching competencies to be included in teacher education programs. In a discussion concerning the identification of competencies, the AACTE Committee on Performance-Based Teacher Education recommends that a clear description of the projected roles of the professional teacher be prepared before instructional programs are formulated. Such conceptualizations would then serve to shape the direction of the instructional program including the identification of basic teaching competencies. The writers hasten to add that no one model of the professional educator has been validated as the "best." Conceivably a teacher-preparation institution could develop alternative concurrent programs based on varying conceptualizations of the professional role of the future teacher.[9] Clarke in a discussion of designs for programs of teacher education also emphasized a number of presage factors or decisions which must be made before developing a program design. Of particular interest with respect to the identification of teaching competencies is his stress on the need for conceptualizing the context for which teachers are to be prepared. Context as defined by Clarke refers to the anticipated future state of the world, the nation, education, teaching and the teaching profession. A related factor, "extent of lead", defined as the gap between what exists and the state of affairs for which teachers are being prepared, was also examined.[10] It would appear that both context and extent of lead need to be considered in relation to the projected role of the prospective teacher as program planners endeavor to provide guidelines in the selection of teaching competencies to be included in any given CBTE program.

Noting again, the lack of an adequate research base for formulating validated competencies, Houston proposed six somewhat specific approaches to identifying teaching competencies which he believes can be used individually or in various combinations. He includes (1) course content translated into competency language, (2) task analysis based on projected professional roles, (3) analysis of generalized goals of education in terms of desired pupil outcomes, (4) needs assessment of a particular school program, (5) hypothesized theoretical positions descriptive of the effective teacher, and (6) identification of general program areas such as "Classroom Management" which can then be deductively analyzed to identify related competencies.[11] Procedures similar to numbers one, three, and five listed above were used to identify initial teaching competencies in one or both of the teacher education programs discussed in the previous chapter.

Norman R. Dodl, director of the project for the development of *A Catalog of Teacher Competencies* approached the identification of teaching competencies from yet another perspective. The Project staff analyzed teacher education program documents which served as a basic source for statements of teaching competency. A series of follow-up workshops held during late 1971 and the Spring of 1972 provided an opportunity for dialogue between teachers and other public school personnel and university faculties. Thus both schools and universities were represented in the revision and expansion process.[12]

In a later statement focused on the selection of competency outcomes in teacher education, Dodl substantially agreed with Houston concerning the several different bases for the identification of teaching competencies listed earlier in this discussion.[13]

In practice the identification of teaching competencies has been approached from a variety of bases. However, whatever base is used to generate teaching competencies if each competency is then screened through a preconceptualized model of the role of the teacher the overall consistency within any given CBTE program is more nearly assured.

Problems and Issues

A number of problems and issues associated with the identification of teaching competencies continue to demand the attention of educators as CBTE programs move beyond initial stages of implementation to become more fully operational. Whether fundamental competencies in teaching can be identified and validated and if so whether such generic competencies should become requirements for all teachers or only for teachers with similar responsibilities is one of several issues to be considered. Other concerns center around the following questions: (1) How can a wide array of competencies best be sequenced and grouped so as to promote optimum integration of learnings by prospective teachers helping them to view teaching as a whole rather than in atomistic fragments? (2) How can all major educational constituencies such as the community, professional associations and school systems be more meaningfully involved in the critical step of competency identification? (3) How can follow-up studies of graduates of CBTE be designed to yield significant feedback concerning the selection of competencies?

However, partially in response to the need to identify teaching competencies to be included in teacher education programs conceptualizations of the effective-competent teacher continue to appear in the literature. Notable among the various models of the effective teacher presented in recent professional writing are the following: (1) the use of self as instrument in teaching, a perceptual view proposed by Combs[14,15] and (2) the teacher as institution builder, interactive teacher, innovator and scholar as conceptualized by Joyce and others and as implemented in the preservice teacher education program at Teachers College, Columbia University.[16,17] In a discussion of the training of educators, a useful summary of sixteen additional models for teaching is presented by Joyce, Weil and Wald. For each model listed the authors identified the major theorist, the family or orientation and the mission or goals for which it is applicable. The family or orientation refers to one of the following four categories: (1) information processing, (2) social interaction, (3) person and (4) behavior modification.[18] It would appear that educators engaged in planning and developing a CBTE program or portions of such programs would find it helpful to review various teaching models as a preliminary step in the process of conceptualizing their own training program for teachers.

With respect to future educational research related to problems in the selection of teaching competencies, Dodl urges that all competencies included in CBTE programs be viewed in relation to hypotheses to be tested and that evidence-gathering and record-keeping systems be set up in order to contribute data for accepting or rejecting the stated hypotheses.[19] The AACTE Committee on Performance-Based Teacher Education also supports this position.[20] It is hoped that future process-product studies of teaching effectiveness will continue to strengthen the knowledge base needed in the identification of crucial teaching competencies. The National Institute of Education for example is currently sponsoring studies to determine the relationship between teacher performance and student learning and to specify the types of skills teachers should possess.[21]

SPECIFYING RELATED OBJECTIVES

In competency-based teacher education programs objectives are directly related to identified teaching competencies. Each competency-objective statement is focused on anticipated learner outcomes with respect to the teaching competency to be developed. Broad terminal objectives linked to the overall goals of the program are refined to a level of specificity which makes it possible to link objectives to individual tasks to be carried out by the teacher-learner. These more specific objectives serve as a basis for making decisions about the selection and sequencing of appropriate instructional activities. The following discussion will focus on the problems and issues concerned with the development and use of specific objectives in competency-based teacher education programs.

As outlined by Arends, Masla, and Weber instructional objectives reflect three major elements: (1) the competency to be demonstrated, (2) the conditions under which the competency is to be demonstrated, and (3) the criteria to be applied in assessing the student's attainment of the stated objective.[22] Examples of objectives which include each of the three elements follow:

(1) The student will work with a team of three or more fellow students to construct a partially structured interview guide which will then be used by the student as an instrument in carrying out an informal interview concerned with the general reading habits and interests of at least one child.

Competence in these areas will be said to have been demonstrated when the student will have used the interview guide to elicit, and to report in written outline form, information as to a child's attitute toward books and reading, his play habits, his hobbies and his reading interests.

(2) The student will be able to provide for pupil experiences in creative writing or speaking using differentiated procedures of teaching lessons somewhat similar in context to two small groups of pupils with varying backgrounds of achievement in written and oral expression. Competence in this area will be said to have been demonstrated when the teacher-intern is able to adapt instruction to each of two groups so as to elicit creative writing or speaking from at least seventy percent of the participating pupils at a level acceptable to the cooperating teacher and/or faculty advisor.

The examples above are taken from original instructional modules developed by the writer, field-tested in an undergraduate teacher preparation sequence and presented in Part II of this book. A number of issues with respect to the use of such precisely stated objectives continue to be a focus of debate. Two major areas of concern are related to stating competency-objectives in behavioral terms and to the use of performance criteria in the assessment of such objectives.

With respect to the development of objectives, Mager defined the term behavior as any visible activity displayed by the learner. A behavioral objective is one that focuses upon the kind of visible behavior that can be accepted as evidence that the learner has achieved a given objective.[23] In a summary of essential characteristics of CBTE the AACTE Committee on Performance-Based Teacher Education clearly supported the use of behavioral objectives stating that competencies to be demonstrated by the student are to make possible the assessment of a student's behavior in relation to specific competencies. The Committee is not unaware that this requirement makes it difficult to apply the process where the outcomes sought are complex and where they are of an affective nature.[24] There is a general agreement among teacher educators that teacher attitude is an important factor in teacher effectiveness. In a review of research on the shaping of teacher attitude, Loree pointed out that in recent efforts to rethink objectives for teacher education programs the development of three types of attitudinal changes has been given high priority in program planning: (1) attitude of the teacher toward himself (for example—a better understanding of one's own assets, beliefs, and values), (2) attitudes concerned with human relationships (for example—the quality of "warmth" toward pupils) and (3) attitudes about the teaching-learning process itself (for example—one's approach to teaching style as learner-centered versus teacher-centered).[25] Several of the original nine models for the preparation of elementary school teachers funded by the United States Office of Education, and used by a number of planners of CBTE as referents for thinking about teacher education, direct attention to the development of teacher attitudes in the affective domain. It is also interesting to note that in a recent publication concerning recommendations related to competency-based teacher education the AACTE Committee on Performance-Based Teacher Education stated: "The earlier report may have given the impression that goals (competencies) which cannot be defined in assessable terms should be eliminated. Not so. The obligation is to strive for clarity, rigor, explicit definition. But if the teacher educator is convinced that something belongs in the program even though he cannot measure it, he should feel perfectly free to include it but recognize that that aspect of his program is not performance-based."[26]

Popham in a dialogue with school personnel focused on instructional objectives and reported in the *Educational Researcher* observed, "The reality is that teachers cannot organize their *entire* instructional activities around explicitly stated measurable, higher level cognitive and affective goals. I feel it's better to organize a *portion* of your instruction around such objectives than to abandon the whole approach."[27] Thus, while CBTE has been conceptualized around the notion of explicit behavioral objectives based upon identified teaching competencies, a trend toward a somewhat more moderate stance with respect to the inclusion of affective learnings which may not be assessable in terms of visible student performance, is evidenced.

A second major issue concerning the assessment of identified competency-objectives centers around the question of performance criteria in terms of teaching behaviors versus the assessment of performance in terms of pupil outcomes. The desirability of developing teaching competencies related to pupil outcomes cannot be questioned. Yet, in an overview of fifteen competency-based teacher education programs Elfenbein noted that assessment of competencies was concentrated for the most part on the prospective teacher's ability to perform certain acts in the classroom. Such specified performance competencies are more readily visible and more easily measured. Most directors found that process-product assessment was too difficult because of the many intervening variables that impinge on pupil outcome for which the prospective teacher cannot be held accountable. However, the University of Utah, Western Washington State College and the University of Washington attempted to define the assessment of competency-objectives in terms of pupil outcomes.[28] Until such time that the relationship between teacher behaviors and the consequent learning by students is more thoroughly investigated it is questionable as to what extent prospective teachers can or should be held responsible for consequence competencies. However, Popham concluded that if educators become more attentive to what happens to learners as a consequence of instruction rather than to the instructional procedures they have assembled—more attentive to outcomes than to innovations—a desirable change in teaching orientation of educators will develop.[29] Thus these two major issues concerning competency-objectives and their use in CBTE programs remain unresolved. It is important that such issues receive continued attention from all concerned with the instructional component of competency-based teacher education programs.

Chapter IV will present an overview of learning activities included in CBTE programs with specific emphasis on the elements of a modular sequence.

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CHAPTER IV

PROVIDING APPROPRIATE INSTRUCTIONAL ACTIVITIES

— IV —

PROVIDING APPROPRIATE INSTRUCTIONAL ACTIVITIES

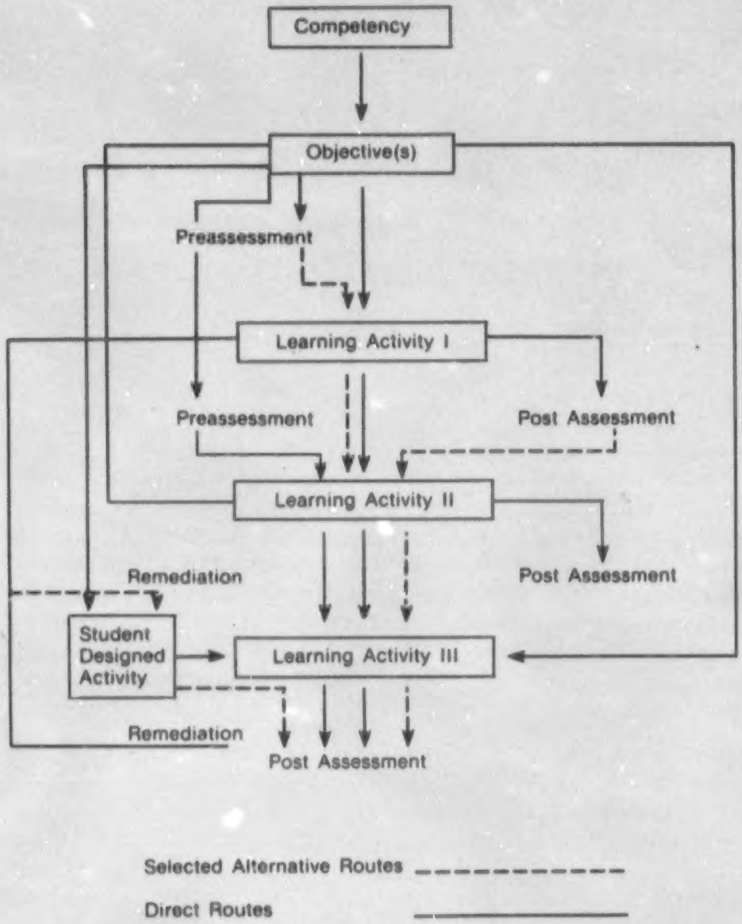
Instructional activities included in a competency-based teacher education program provide the student an opportunity to develop selected competencies under conditions specified in the stated objectives. Thus any given learning activity is designed to serve as a vehicle for promoting growth in competency. The activity itself may or may not be used to assess the student's entry-exit level of competency. For example a micro-teaching learning activity may be structured to function as preassessment, as practice and/or as post assessment of competency.

It is important to note that (1) a variety of learning activities may be used to develop a given competency-objective, (2) both preassessment and post assessment may be used for diagnosis related to the extension, omission or revision of further learning activities, (3) a student may select those learning activities that for him promise the most meaningful and most direct route to the development of competency and (4) learning activities may be designed by the student learner.

These varying relationships and linkages are outlined in Figure I.

FIGURE I

Linkage of the Components of the Instructional System


Competency
Objective(s)
Preassessment
Learning Activity I
Preassessment
Post Assessment
Learning Activity II
Remediation
Post Assessment
Student Designed Activity
Learning Activity III
Remediation
Post Assessment
Selected Alternative Routes
Direct Routes

While not apparent in the above diagram, a given learning activity may be adapted for use in the development of a variety of competencies.

Preassessment and post assessment of competencies will be discussed in Chapter V with the reader's understanding that in practice both preassessment and post assessment may be considered as either independent of or an integral part of any given learning activity.

PROBLEMS IN THE CONCEPTUALIZATION OF LEARNING ACTIVITIES

Competency-based teacher education programs are concerned with all of the content included in the professional sequence of the preservice teacher education program. Thus learning activities center in the development of (1) concepts of human development and learning, (2) content for the teaching specialty, (3) designs for teaching and learning, (4) the analytic study of teaching and (5) demonstration and evaluation of teaching competencies.[1,2]

As indicated earlier appropriate learning activities must be developed for each instructional objective selected for use in a competency-based curriculum. Generating such learning activities has been a difficult task for those involved in the development of CBTE programs.

It has been noted by Benjamin Bloom that teachers can translate educational objectives into evaluation procedures quite rapidly but that considerable more time is required before they can become skillful in developing learning experiences appropriate to the objective. He has further observed that breaking away from habitual teaching practice requires much more involvement and effort from the teacher than does the stating of objectives or the use of new and different evaluation instruments.[3]

This view is reflected in a statement by the AACTE Committee on PBTE. The Committee reports that much of the instructional material that has come to their attention is poorly conceived. It further notes that textbooks and supplementary materials designed for courses covering a semester or a full academic year are often unsuitable for the shorter instructional units commonly found in the CBTE programs.[4]

In practice many CBTE programs became operational before faculty had been given adequate time to develop appropriate learning activities and materials. The need for learning activities designed to meet stated competency objectives is apparent.

THE INSTRUCTIONAL MODULE

In the attempt to individualize instruction and to provide learning experiences related to selected competency-objectives most CBTE program developers have moved toward the use of instructional unit packages or modules. Formats vary as do the names used for such units of instruction. One finds for example the Proficiency Module (PM) at the University of Georgia, the Weber Individualized Learning Kit (WILKIT) at Weber State College, and the Competency Package (ComPac) at Southwest Minnesota State College.

While they may be called by different names many such instructional units include some or all of the following elements suggested by Arends, Masla and Weber.[5]

1. Objectives (and rationale)
2. Prerequisites
3. Pre-assessment procedures
4. Instructional activities
5. Post assessment procedures
6. Remediation procedures[6]

The following Module developed by the writer as part of a module cluster used in a preservice teacher education program was designed within the Arends, Masla, Weber format. Criteria considered in the conceptualization of the learning activities required an affirmative answer to each of the following questions:

1. Does the learning activity provide for practice related to the stated competency-objective?
2. Does the learning activity provide for varying student entry skills?
3. Is the teaching behavior to be practiced and/or demonstrated adaptable to varying field settings?
4. Does the learning activity provide for creative student input and/or student selected options?
5. Is the learning experience feasible in terms of available material resources?
6. Is the learning experience feasible in terms of available human resources?
7. Is the learning experience feasible in terms of required student input?

ON EXPLAINING: TEACHING STRATEGY IN THE SOCIAL STUDIES

II. Engendering Comprehension of Concept(s) Related to the Development of Map and Globe Skills

Objective

Given an appropriate opportunity, the teacher-intern will be able to explain (engender comprehension of) at least one concept related to the development of map and globe skills. Acceptance level of performance would be the eliciting of correct responses from sixty percent or more of the pupils.

A pupil will demonstrate comprehension by referring to the concept correctly in writing or speaking, by responding correctly to a question about the concept, by describing a personal experience exhibiting an understanding of the concept, by demonstrating the correct use of the concept when drawing a map or constructing a globe, or by any other procedure designed by the teacher-intern and/or cooperating teacher that gives evidence of mastery.

Prerequisite

None

Preassessment

None

Instructional Activities

1. Read pp. 133-140 in *Social Studies for the Seventies*, Second Edition, by Leonard S. Kenworthy. Xerox College Publishing, Lexington, Massachusetts, 1973.
2. Write out a plan for teaching a concept(s) related to the development of a map or globe skill. Include in your plan at least one pupil activity other than discussion and/or reading. Confer with your cooperating teacher with respect to your plan. Include a procedure for evaluating the effectiveness of your teaching as evidenced by pupil comprehension.
3. Teach one or more concepts related to map and globe skills to a group of children. Analyze your lesson in terms of pupil's responses (both correct and incorrect) using evaluative procedure(s) set up by you and your cooper-

ating teacher. State in what ways information gained from your analysis will influence your own future teaching goals.

Post Assessment

Acceptance level of performance will be a tally of correct responses for sixty percent or more of the participating pupils.

Remediation

Additional instructional activities intended to bring students up to criterion level would be designed by the student with his cooperating teacher and/or faculty advisor.

ADDITIONAL REFERENCE

Joyce, Bruce R. *New Strategies for Social Education.* Chicago: Science Research Associates, Inc., 1972. p. 368-384.

SUMMARY

Engendering Comprehension of Concept(s) Related to the
Development of Map and Globe Skills
(to be completed with student)

	Date and Cooperating Teacher's Signature
1. Student has written out a plan for teaching a key concept(s) related to the development of map and globe skills as outlined under instructional activity number 2. Plan with cooperating teacher's notation is attached.	
2. Student has taught at least one key concept related to the development of map and globe skills to a group of children.	

3. Student has analyzed the lesson as outlined under instructional activity number 3. Analysis with cooperating teacher comments is attached. ____________________

4. Student has attained acceptance level of performance. ____________________

5. Additional concerns and/or comments regarding any of the above. ____________________

Preservice teacher education students who carried out this module as part of their program requirement worked as teacher interns in a field setting four days each week for one full semester. The module was designed for use with pupils at varying age-grade levels, kindergarten through grade 6.[7]

THE FIELD EXPERIENCE COMPONENT

A student's contact with schools and with children begins early in CBTE programs. Sequencing of field related or field based learning experiences may vary but many instructional planners follow a design somewhat similar to that experienced by students in the Teachers College, Columbia University preservice program. This program evolved as an outgrowth of the Teachers College model elementary teacher education program funded by the USOE. As originally outlined by Joyce students experience the school through six sequential phases of learning activities. (1) The student participates as a teacher's aide and is given an opportunity to carry out an analysis of teaching and learning in the school and classroom. (2) The student experiments with varying teaching strategies in tutorial or small group teaching. (3) The student experiments with unit teaching. (4) The student as a member of an inquiry school team is given an opportunity to study the school as a center of inquiry. (5) Students operate their own school program, experimenting and studying teaching and learning. (6) The student starts his teaching internship as a first-year teacher.

Joyce suggests that ideally first-year teacher interns should be placed so that three occupy two normal teaching positions.

Such an arrangement allows the neophyte teacher time to continue the study of teaching and learning and thus to further develop his professional competencies.[8]

In practice the Teachers College program is completed in three semesters. The culminating summer semester is one in which students develop and operate a school program for an integrated urban population.

The six phases outlined by Joyce are used in part within varying patterns of emphasis by each of the fifteen CBTE programs described by Elfenbein. Some attempts at follow-up of first-year graduates is evidenced. For example at the College of Saint Scholastica, Duluth, Minnesota faculty interview and observe former students who teach in the area. Graduates and their public school supervisors are also requested to fill out questionnaires to be used as program feedback.[9]

In addition many CBTE programs provide for micro-teaching and simulation experiences prior to or concommitent with field related experiences. Thus demonstration of competency in structured and unstructured settings is feasible through micro-teaching, simulated experiences and the actual field laboratory.

It is important to note that some CBTE programs conduct all student learning experiences in a field setting. Most instructional designs however, provide for a combination of school and college facilities and resources.

THE HUMAN RELATIONS COMPONENT

Students involved in CBTE programs work through many learning experiences independently. While instructional activities are indeed adapted to the individual learning styles and varying entry levels of the participating student, thus providing for individualization and personalization, there is some concern that the important interactive human relations element so essential to the preparation of future teachers may not be given sufficient opportunity for development. Instructional planners have recognized this potential lack and have developed varying strategies to meet this need.

As outlined in Chapter II, a human relations laboratory and/or a series of seminars stressing the helping relationship may provide the interactive component needed to develop an awareness of self and self in relation to others. Still other programs such as the one at the University of Texas include a staff clinical psychologist who is available to students for counseling on an ongoing basis. Some programs assign specific advisors for the duration of the program thus providing another avenue for continuity of relationship. Such advisory relationships may be extended to include an advisory group of student peers.

Interaction within a team structure typical of Teacher Corps procedures is yet another attempt to provide needed experience in interpersonal relationships as cooperating teachers and prospective teachers work together in an open classroom setting. The typical team may be made up of a leader, two other classroom teachers, seven future teachers and 120 children. Still other CBTE programs assign students to their practicum experiences in varying student teams. Thus students can provide assistance, critiques and support for one another as they progress through the program.

Seminar sessions are available to students in all programs. Some are structured and required. Some are optional and may be scheduled upon the student's request in response to student need or student interest. The University of Washington STEP program emphasizes interaction seminars in the school districts. Administrators, teachers, prospective teachers, and college faculty interact as together they attempt to solve problems and define roles more clearly.

Two CBTE programs described by Elfenbein provide for specific orientation sessions. Students and faculty withdraw from the campus and participate in activities designed to give both students and faculty an opportunity to know one another better. The structuring of such a retreat is dependent upon the perceived purposes of the program planners. Interestingly the orientation at Brigham Young University includes a three day camping trip in the mountains surrounding the campus.

Many programs foster cross-cultural awareness and provide input of multiracial, multiclass and multi-cultural experiences. Some programs require student involvement in community agencies. Thus students become familiar with the community and its problems. Several provide diversity of experience in rural and urban field settings. Others provide for cross-cultural awareness through course work which may or may not be modualarized.[10]

It is interesting to note that materials currently available through the National Resource and Dissemination Center include Protocol Materials on Black Dialect. Twelve taped lessons present twelve characteristics of black dialect. A pre-test and post-test are designed to indicate attitudinal changes which might occur as a result of the use of these protocol materials. Protocol materials will be discussed more fully in the following section of this chapter.

In summary it would appear that all of the specific techniques suggested by Osborne in a discussion of the teacher and sensitivity training are used in some combination in the majority of CBTE programs. Osborne's list includes the following:

1. Laboratory settings for the study of group process.
2. Laboratory training in communication.
3. Seminars in group theory and research.
4. Ongoing supervision and consultation.
5. Feedback and listening exercises.
6. Simulation techniques in the modeling of behaviors.
7. Role-playing techniques.
8. Case-study approaches.
9. Study of real-life situations using video.
10. "Share-ins."[11]

INSTRUCTIONAL RESOURCES FOR COMPETENCY-BASED TEACHER EDUCATION PROGRAMS

With the continuing development of the competency-based teacher education movement commercial instructional materials are becoming increasingly available to designers of learning sequences. Among them are for example, the teaching strategy materials included in the mini-courses from the Far West Regional Laboratory and the Teaching Skills materials from General Learning Corporation. In addition protocol materials developed by universities and educational agencies and funded through the United States Office of Education Protocol Materials Development Program are beginning to be disseminated through the National Resource and Dissemination Center.[12]

Protocol materials present classroom behavior on film and tape. They provide the student with the opportunity to study, restudy, analyze and interpret each behavior.

Protocol materials currently available from the United States Office of Education Program include such instructional materials as Protocol Materials in Developmental Reading and Protocol Materials on Classroom Management. These materials have been field tested. Evaluation data on usage suggest that protocols can be adapted for effective use in both preservice and inservice teacher education programs and can be used either in individual or group settings.

The development of module banks for sharing of instructional materials among competency-based programs provides yet another source of instructional materials. The Instructional Module Development and Dissemination Project at the University of Houston for example, is involved in such a program. Upon deposit of three acceptable modules any teacher education center is eligible to share in modules that other institutions have developed and deposited in the Houston bank.

Various listings of resources for competency-based education are also beginning to be available. One published in 1971 presents a classification of competency-oriented tools for teacher education.[13] A second published two years later (1973) is an annotated listing of resources for performance-based education.[14] Thus the instructional planner does not need to rely exclusively upon himself for the conceptualization and design of modular units and the learning activities presented within them.

However, if the competency-objectives identified by a given teacher education institution are indeed unique to that program care must be taken to adapt materials to the stated competency-objectives. Houston warns that when CBTE planners are lured by attractive instructional packages and attempt to design the instructional component around such available materials they violate a basic tenet of CBTE movement, namely that the instructional program is derived from and linked to previously identified competency statements and thus is to be developed after such competencies are identified.[15]

In conclusion it is important to note that a number of issues and problems concerning sequence and validation of learning activities continue to be of concern to persons involved in designing the instructional component of CBTE programs. Questions such as those discussed below remain largely unanswered even as CBTE programs continue to become more fully operational.

In response to the perceived need for greater integration of student learnings one might ask, "Should concurrent development of several modules be encouraged and/or required so as to promote greater integration of student learnings? If so in what combination? In what sequential order?" Little or no empirical data is available to answer questions such as these.

A second major concern is linked to the need for validation of materials and related activities through repeated field testing. Here one might well ask "What preservice learning activities will indeed increase the prospective teacher's ability to promote pupil learning?" Thirdly, "What criteria should be set as standards for the development of CBTE materials?" is yet another crucial unanswered question.

In agreement with Clarke, this writer believes that the heart of teacher education is the program of experiences designed for the teacher candidates.[16] The above questions merit our professional attention.

Chapter V will discuss assessment procedures as they pertain to the instructional component of CBTE programs.

NOTES

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—V—

EVALUATION AND FEEDBACK

Assessment procedures are recognized as critical to the establishment and maintenance of CBTE. With respect to this basic need the AACTE Committee on Performance-Based Teacher Education commented, "Remove assessment from PBTE and all that is left is an enumeration of goals and provision of instruction which hopefully will lead to their attainment—not much on which to pin one's hopes for significant improvement in the educational program."[1]

In practice the evaluative elements linked to CBTE programs have been at best, only partially developed, and presently program feedback is obtained principally through somewhat informal data collection. Since problems and concerns relative to assessment procedures continue to loom large, the need for the development of pilot assessment systems is apparent.

This chapter will focus on a discussion of assessment procedures linked to the instructional component of CBTE programs and to issues related to such assessment.

ASSESSMENT PROCEDURES

In a summary discussion of conceptual foundations of research in teacher education, Turner asserts, "For a preservice teacher education program to be demonstrably valid, relationships must be established between the treatments delivered in the program and performance criteria in teaching. For the performance criteria to be valid, they must be shown to be either logically necessary to teaching or associated with pupil learning attributable to teaching."[2]

Teacher educators concerned with the development of CBTE programs are well aware of the need for identification of linkages between (1) learning activities provided for students in teacher education programs and teaching behaviors to be demonstrated and between (2) specified teaching behaviors and the subsequent association to pupil learnings. The AACTE Committee on PBTE recommends that before a program is launched there is evidenced at least a basic rationale and recognized commitment to assessment, with suitable provision for data-gathering and record keeping. In addition as the program develops evaluation techniques, procedures and instruments should be reviewed periodically so that needed improvements in the assessment process itself will indeed evolve and evaluative procedures will become an increasingly integral part of the CBTE programs.[3]

In practice modular instructional units within the CBTE programs have been used as vehicles for the basic unit or microunit in the assessment system. In a well-conceived module each competency-objective is matched with its teaching-learning activity or activities and the criteria for determining whether the objective has been reached are built into the competency-objective statement. The following competency objectives are illustrative of micro-assessment procedures linked to individual modules:

(1) The teacher-intern will be able to explain (engender comprehension of) at least one key term or key concept related to the social studies material under discussion. Acceptance level of performance would be the eliciting of correct responses from sixty percent or more of the pupils. A pupil will demonstrate comprehension by using the term or concept correctly either orally or in written form, by responding correctly to a question including the term, by describing a personal experience related to the term, by giving the meaning of the term using his own vocabulary, or by any other procedure designed by the teacher-intern and/or cooperating teacher that gives evidence of mastery.

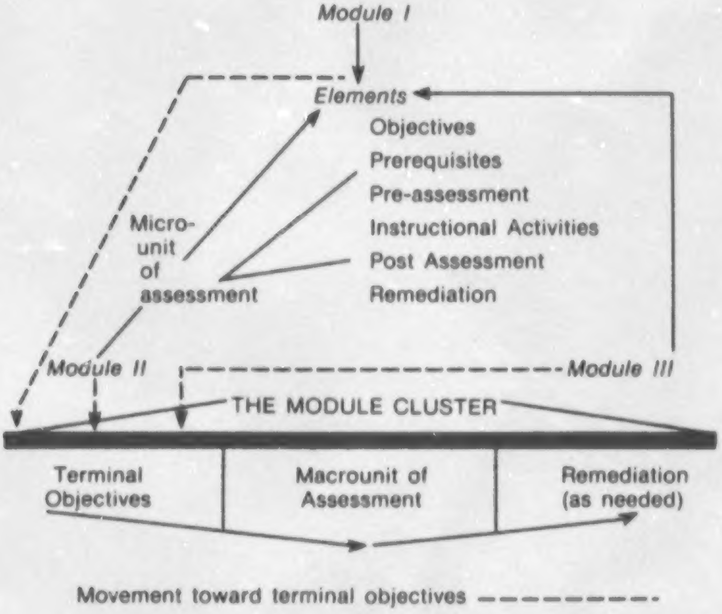
(2) The teacher-intern will plan and teach a lesson for a group

> of two or more pupils providing learning experiences leading to creative oral or written expression. The original plan will be extended to include differentiated follow-up activities based on the analysis of results of the previously taught lesson. Competence in these areas will be said to have been demonstrated when the teacher-intern is able to make appropriate differentiated follow-up pupil assignments at a level acceptable to his supervisory teacher and/or faculty advisor.[4]

In addition, the effectiveness of several microunits may be gauged in relation to terminal objectives for a number of related modules, the module cluster, using instruments that assess the degree to which the broad overall objectives have been met. Thus a macrounit of evaluation may be provided for within the assessment system. Figure II illustrates the relationship of the microunits and macrounits of assessment in a module cluster.

FIGURE II

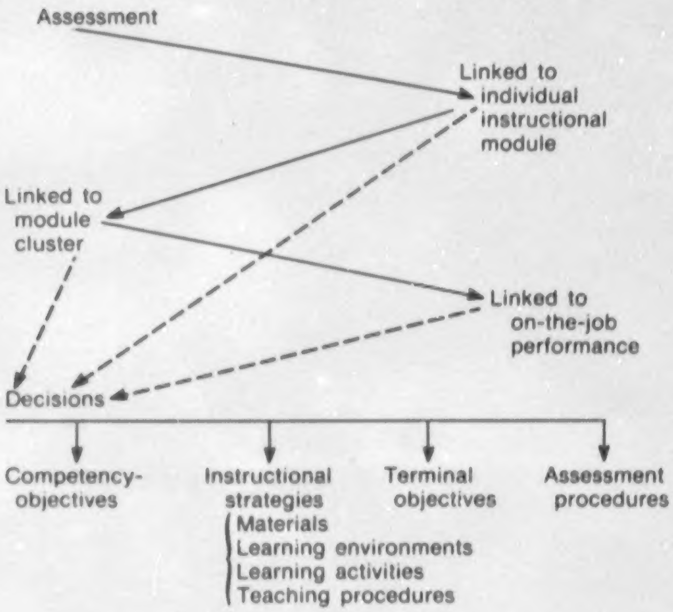
Relationship of the Microunit and Macrounit of Assessment in a Module Cluster


Module I
Elements
Objectives
Prerequisites
Pre-assessment
Instructional Activities
Post Assessment
Remediation
Micro-
unit
of
assessment
Module II
Module III
THE MODULE CLUSTER
Terminal Objectives
Macrounit of Assessment
Remediation (as needed)
Movement toward terminal objectives

Ideally, evaluation procedures linked to individual modules and module clusters provide for a continuous monitoring of student progress as well as yielding data on the effectiveness of particular instructional strategies and the adequacy of instructional materials including the modules themselves. Continuous evaluation as part of an ongoing process of feedback, decision making, revision and refinement is focused on the development of ever closer approximations of both the immediate and overall goals of the instructional program. Feedback to students is maintained throughout the program. Responsiveness to identified need for change within the instructional program then becomes more nearly a reality. Program modification and refinement generated from evaluative data are made available to program designers. Figure III presents a flow chart of assessment, decision and feedback as related to the instructional component of CBTE programs.

FIGURE III

Flowchart: Assessment, Decision, Feedback


Assessment
Linked to individual instructional module
Linked to module cluster
Linked to on-the-job performance
Decisions
Competency-objectives
Instructional strategies
Materials
Learning environments
Learning activities
Teaching procedures
Terminal objectives
Assessment procedures

Assessment of Student Achievement

Assessment of student achievement within CBTE programs is carried out through a variety of devices and procedures. Paper and pencil experiences, observation schedules, interaction analysis, interviews, simulation and micro-teaching experiences are fairly standard. In addition products of performance and self evaluation scales may be used. Products of performance include such items as a series of lesson plans, the conceptualization of a teaching unit, an analysis of pupil accumulative records. Evaluation is carried out through faculty input as well as through student self appraisal. Peers, cooperating teachers and faculty teams may also provide evaluative feedback to the prospective teacher.

Assessment of student achievement as evidenced in follow-up studies of graduates during their early years of teaching is for the most part a potential source of valuable data concerning the effectiveness of CBTE programs—potential because most programs have been in operation for a relatively short period of time and program developers have concentrated their efforts and their available funds on the implementation and development of the preservice instructional component. However, research focused on first-year graduates of CBTE programs is in process at such institutions as the Oregon College of Education. It is anticipated that such studies will identify problems and successes of first year graduates and yield data for program improvement.[5] In addition future studies may wish to analyze comparative performance data with regard to the teaching of graduates of CBTE programs and teachers trained under more traditional preparation programs.

PROBLEMS AND ISSUES

A number of issues regarding assessment and evaluation continue to demand the attention of designers and developers of CBTE programs. Questions such as those of how?, by whom?, for what purpose?, should assessment be carried out need clearly defined answers. With respect to such issues two areas of basic concern will be discussed: (1) performance criteria and (2) summative evaluation.

Performance Criteria

The question of "How" bears upon the fundamental issue of criteria of performance as demonstrated teaching behaviors versus pupil outcomes discussed briefly in Chapter III. That pupil outcomes are effected by numerous variables such as pupil attitude, previous learnings and individual capabilities for which prospective teachers cannot be held accountable is not questioned. Nevertheless, Turner's Levels of Teaching Performance, originally proposed as steps in teacher certification or as points at which feedback to teacher education programs could be generated, have also been proposed for use in relation to specifying degrees of performance as evidenced by students progressing through CBTE programs.[6] Elfenbein, for example, suggests "These levels are also applicable to the orientation of objectives from teacher performance to process-product."[7] This is true. However, as originally presented in the final report of the Committee on Program Priorities in Teacher Education, Criterion Level 3 was to measure the degree of mastery attained by students in preservice programs.

Turner points out, "This criterion level (3) differs from Criterion Levels 1 and 2 in that pupil performance data are eliminated from the criterion."[8] Not all members of the committee were in agreement that Level 3 was indeed appropriate for assessing the effectiveness of training programs. Some proposed that Levels 1 and 2 should be used as a basis for assessment.[9] A brief description of Turner's six levels of criteria follows:[10]

Level 6	The teacher shows that he understands some behavior, concept or principle of teaching.
Level 5	In a simulated setting a teacher is able to demonstrate a specified teaching skill.
Level 4	In a restricted context such as a micro-teaching experience involving a few students (or peers acting as students) the teacher is able to demonstrate specific teaching behaviors in the cognitive or affective domain.
Level 3	Judgments about teaching competence are based on observable behaviors of the teacher as demonstrated under actual classroom conditions.
Level 2	Performance is related to changes in pupil behavior that can be effected in a relatively short period of time (one or two weeks) and under classroom conditions.
Level 1	Performance is assessed in terms of changes in pupil behavior that can be effected over a three year time span.

The identification of criteria by which to assess the effectiveness of student competency continues to be a major concern as program designers and developers attempt to assess results of competency-based teacher preparation programs. It is interesting to note that Lindsey suggests that consequences of teacher training be evaluated not only in terms of teaching behavior related to pupil progress but also in terms of conditions created by the teacher.[11]

Summative Evaluation

In a description of final assessment procedures related to student performance in fifteen CBTE programs Elfenbein comments that terminal assessment appears to be somewhat subjective and determined by the assessor.[12] However, while this is a problem of concern to many program developers a number of institutions are in the process of designing assessment systems including measuring instruments that will more adequately provide for the evaluation of the comprehensive performance of prospective teachers. Faculty at the University of Washington, for example, have developed an instrument based on a conceptual model of teaching containing four domains of performance criteria: 1) professional and personal, 2) instructional preparation, 3) instructional implementation, and 4) instructional evaluation. The four domains form the major areas included in the evaluative instrument. Each area is also subdivided according to performance categories and criteria. The instrument provides for comments and checks relative to mastery. A single item from the Instructional Implementation Domain is reproduced below:

Facilitates Instructional Objectives

_____ established motivation specific to learners and subject.

_____ paces instruction flexibly in terms of feedback from learner behavior.

_____ modifies strategies and activities to facilitate learner behavior.

_____ summarizes to reinforce learning and achieve closure.

The instrument has been field tested by university faculty, field personnel and interns. An evaluation resource guide lists selected examples of criterion measures for the performance criteria included in the instrument.[13] Thus while comprehensive evaluation of terminal competencies has too often remained relatively informal effort toward the development of appropriate evaluative instruments is evidenced.

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— VI —

TRENDS IN CERTIFICATION RELATED TO CBTE

Basic relationships between certification and the instructional program provided for prospective teachers are currently being brought to the fore as CBTE programs seek to become legitimized under state certification standards. At the same time in response to pressures for teacher accountability, legislation in some states is lending impetus and support to evolving competency-based teacher education programs.

In a recent survey published by the National Education Association with respect to standards affecting school personnel, fifty states responded to a general inquiry about state laws, decrees, requirements and activities pertaining to performance-based teacher education and certification. Ten states reported no relationship between the two. Ten states indicated that CBTE and teacher certification were under study. Nine states provided for linkage between programs and certification through state approved CBTE programs. The remaining twenty-one states reported various stages of development with respect to the linkage between teacher certification and competency-based teacher education programs. Washington, for example, indicated that the state was operating under 1971 guidelines and standards which incorporated the competency-based teacher education concept. Arizona, on the other hand, simply attested to three state universities developing performance-based programs. Summaries of the data pertaining to performance-based teacher education and certification as reported in the NEA survey are presented in Table I and II.[1]

TABLE I

Summary Competency-Based Certification: None and Under Study

None (10)	Under Study (10)
Alaska	California
Arkansas	Colorado
Delaware	Idaho
Indiana	Kansas (discussion p.-b. certificate renewal)
Iowa	New Jersey
Mississippi	New Mexico (discussion p.-b. recertification)
Missouri	Rhode Island
Montana	Tennessee
Nevada	West Virginia (p.-b. continuing education planned)
South Carolina	Wyoming

TABLE II

Summary Competency-Based Certification: Approved Program Approach and Developing Certification Programs

Approved Programs (9)	Developing Certification Programs (21)
Hawaii	Alabama
Kentucky	Arizona
(Institutions may	Connecticut
attest to competency)	Florida
Michigan	Georgia
(model program 1972-73)	Illinois
Nebraska	Louisiana
Oklahoma	Maine
Pennsylvania	Maryland
(all programs must be p.-b.)	Massachusetts
Utah	Minnesota
(State approved programs	New Hampshire
at Weber State College;	New York
experimental programs	North Carolina
elsewhere)	North Dakota
Vermont	Ohio
(teacher education program	Oregon
approval is p.-b.; local	South Dakota
evaluation agency component	Texas
of certification regulations)	Virginia
Wisconsin	Washington

BASIC CHARACTERISTICS

There is considerable variation with respect to the characteristics of developing competency-based certification programs. However, one might describe evolving certification as follows:[2,3,4]

1. The majority of the CBE certification programs are alternatives to various approved program plans. Thus competency-based certification may parallel traditional certification patterns. Exceptions include such states as Georgia and New York. Both states have long range plans for total conversion to CBE certification.
2. Early stages of implementation included considerable interstate sharing of information and materials. For example, nine states Arizona, Florida, Minnesota, New

York, Oregon, Texas, Utah, Vermont and Washington were members of the Multi-States Consortium on Performance-Based Teacher Education, Albany, New York.[5] Its mission included the study of the implications of CBTE for state certification.

3. Dissemination of preliminary information is usually carried out through numerous local meetings and conferences of concerned persons.
4. Several states have established study commissions and/or advisory committees for the purpose of reviewing current certification procedures and setting directions for future certification of teachers.
5. CBE programs are generally developed by parity groups representative of the state education department, school administrators, teachers associations, colleges and universities, students and community.

LEADERSHIP ROLES

A number of states have taken leadership roles with respect to the development of CBE certification programs. Among them one might include Florida, Georgia, New York, Oregon, Pennsylvania and Washington. However, the following discussion is focused on certification procedures as they pertain to the evolving competency certification programs in Florida and Washington.

Florida

It is interesting to note that the 1974 *Manual of Standards Affecting School Personnel* reports competency-based teacher education certification as partially implemented in the state of Florida.[6] This reflects the gradual yet steady move toward competency-based teacher certification characteristic of the so-called Florida Plan. As early as May 1970, K. Fred Daniel in describing the Florida approach to competency-based education and certification specified that

1. Change was to come gradually and was to be based on a planned evolution.
2. Assistance in implementing the overall plan was to be made available to school districts, professional organizations, colleges and universities.
3. Training and evaluation programs were to be developed piece by piece with traditional components being

replaced by performance-based components as the latter became available.[7]

State certification under approved program regulations has made it possible for the Florida competency-based programs to exist under the traditional certification structure. In practice, not only are competency-based programs approved but strongly encouraged. Guidelines for the development of preservice and inservice teacher education programs have been widely disseminated, teacher preparation modules have been made available to program developers and funding to support the innovative programs has been forthcoming.[8,9] The State Education Council, a group approved by the Florida Legislature as the official agency for advising the State Board of Education on matters related to teacher education and certification has actively participated in efforts to develop necessary guidelines for teacher preparation programs. Care has been taken to keep the Advisory Council broadly representative of the teaching profession. Interested groups and institutions such as the Florida Education Association, the State Department of Education, the state university system, local school districts, and private colleges and universities have been provided a forum for discussion and action through the Teacher Education Advisory Council. Subcommittees of the Council work through special task force groups whose mission is the study of particular areas of concern regarding teacher education and certification related to CBE.[10]

Several major national resources linked to the CBE movement have been located in Florida. Among them are the following: (1) The National Consortium of CBE Centers located at the Florida State University, Tallahassee, Florida. Supported by a grant from the United States Office of Education, the Consortium serves as a coordinating body for nine National Competency-Based Education Centers one of which is located at Florida State University, Tallahassee. In addition the Consortium serves as a forum focusing on the conceptual refinement of CBE models. (2) The Teacher Center Leadership Institute at the University of South Florida, Tampa, Florida has also been supported by a grant from the United States Office of Education. The Institute focuses upon major problems of CBTE programs and materials to be used in CBTE programs.[11]

Interestingly, a State Board of Education regulation adopted in 1970 makes it possible for teachers to renew their certificates without additional college work. Inservice points are acquired through a school district master plan of approved inservice programs with approval granted through the Florida State Department of Education. Approval for a local school district inservice education program may be secured after completing a self study and after a visit from an evaluation committee. Schmeider reported 65 of 67 Florida school districts as having such approved master plans for inservice training. The inservice approved programs conducted by local school districts are alternatives to renewal of teaching certificates with the addition of six semester hours of study in an approved college or university program.[12,13,14]

Washington

Competency-based teacher certification in the state of Washington is administered under *Guidelines and Standards for the Development and Approval of Programs of Preparation Leading to the Certification of School Professional Personnel* adopted by the State Board of Education in July 1971. For teachers and administrators the 1971 *Guidelines and Standards* provide alternate patterns to the traditional course completion certification requirements effective 1961 for teachers and 1956 for administrators. Interestingly, educational staff associate preparation and certification standards adopted in 1968 are *replaced* by the 1971 standards and guidelines.[15]

Three types of certificates are provided for:

(1) *Teacher Certificates* for personnel whose primary role is teaching either in the elementary or secondary schools.

(2) *Administrator Certificates* for personnel whose service covers general school administration, program administration.

(3) *Educational Staff Associate Certificate* for personnel with specialized roles focused on assistance to the learner, the teacher, the administrator, and/or the educational program. This certificate provides for such roles as health services, counseling, and speech and hearing impairment.

Each of the three types of certificates include a number of fields or areas of preparation which for purposes of certification are referred to as categories. Categories of certification have been designed to remain flexible, responsive to changed personnel needs reflected in actual school practice. New categories may be added under each type of certificate as preparation programs are developed in response to the identified need for new and differentiated school service roles.

Three levels of certification relating to career development are provided for each certificate type:

(1) *The Preparatory Certificate* authorizes experiences with children, youth, and adults in schools or school-related settings designed to develop competence at the initial level of certification. The certificate is valid for one year and is renewable.

(2) *The Initial Certificate* authorizes initial school service and allows the holder to assume responsibility for working with children, youth and adults. The certificate is endorsed to indicate grade level(s), content area(s) and/or specialization(s) of preparation. The certificate is valid for three years and renewable once. Thus the holder may serve under initial certification for six years.

(3) *The Continuing Certificate* authorizes career school service. It assumes continued professional development. It too is endorsed to indicate grade level(s), content area(s) and/or specialization(s) for which persons holding the certificates have prepared. It is subject to renewal should the holder leave educational service for more than four years.[16,17,18]

The 1971 certification regulations are based on four fundamental concepts. In an introductory statement to the 1971 Standards Allen, Cady, and Drummond summarized these concepts in the following list of principles:

1. "preparation should be related to performance and performance related to the objectives of the professional and his clients;
2. preparation should be individualized and give recognition to personal style;
3. preparation programs should be planned and developed in a participatory manner by those affected; and
4. preparation is a career-long continuing process."[19]

Preparation programs are to reflect the four stated principles and are to be developed and implemented by a consortium of agencies. In the Washington Plan the role of the consortium is crucial. It will be discussed in the following section of this chapter.

CONSORTIA: ROLE AND FUNCTION UNDER THE WASHINGTON PLAN

"Though the link between consortia and the teacher-performance movement may not be readily apparent, the purpose and the promise of the movement depends very greatly upon new arrangements and relationships among people and institutions."[20] In the Washington Plan consortia do indeed take on a significant role. A summary of the new approaches to teacher education and certification issued by the Washington State Superintendent of Public Instruction (1972) specifically states that teacher education programs under the new standards will be approved by the State Board of Education only when a program has been developed cooperatively by a consortium of three groups of people exercising equal authority and demonstrating comprehensive participation.[21]

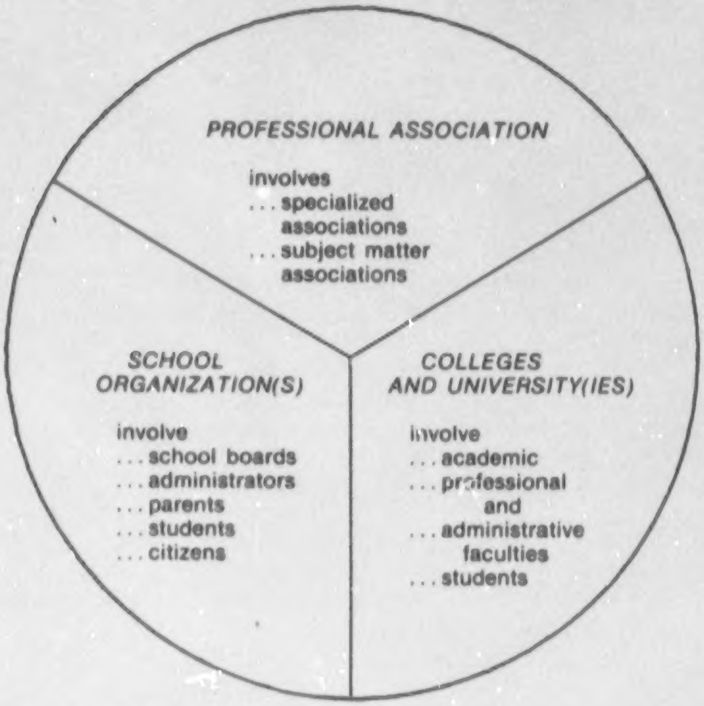
Who is to be Included?

Thus, three groups of educators are represented in the consortium that taken together become the teacher education and certification agency: (1) Professional Association (2) School Organizations and (3) Universities and Colleges. Where an association has been selected by the total certificated staff to negotiate matters of professional concern that association also becomes the *professional association* representative of the consortium. In school organizations where arrangements have not been established for negotiations the professional association representative will be determined by the total faculty. The designated professional organization has in turn the responsibility of involving specialized associations and subject matter associations.

The *school organization* may be representative of any public or independent school system or district. Individuals representing school organizations have the responsibility for providing for input opportunities for parents, interested citizens, students, local school boards and the school administration.

FIGURE IV

Agencies Which Combine to Form the Consortium


PROFESSIONAL ASSOCIATION
involves
. . . specialized associations
. . . subject matter associations
SCHOOL ORGANIZATION(S)
involve
. . . school boards
. . . administrators
. . . parents
. . . students
. . . citizens
COLLEGES AND UNIVERSITY(IES)
involve
. . . academic
. . . professional and
. . . administrative faculties
. . . students

Colleges and Universities the third group represented in the consortium is responsible for involving persons from other academic departments, administrators and students. Figure IV summarizes the agencies which combine to form the consortium.[22]

Purpose and Function of Participating Agencies

The 1971 *Guidelines and Standards* outline three purposes for the consortium of agencies:

(1) For purposes of accountability a consortium is considered a formal partnership functioning through representatives with authority to act for their agencies in carrying out the requirements of the guidelines and standards.

(2) For purposes of developing new programs the consortium is a forum for interested parties working together to determine the form and content of a preparation program.

(3) For purposes of implementing an adopted program the consortium is a management system coordinating the various aspects of the program.[23]

Specific activities and relationships among consortium agencies are summarized in Table III.

TABLE III

Activities and Relationships Among Consortium Agencies[24]

PHASE I	ACTIVITIES
Consortium formation—Initiative to begin may be taken by any agency representing the three groups in the consortium	1. Contact agencies 2. File letter of intent with State Superintendent of Public Instruction
PHASE II	ACTIVITIES
Establishment of policy board—Becomes responsible for all phases of development	1. Establish policy board 2. Outline procedures for decision-making and board actions
PHASE III	ACTIVITIES
Adoption of policies—Follow agreed upon procedures	1. Formulate and adopt governing policies 2. Identify special interest groups to be involved 3. Ensure resources are available for program development
PHASE IV	ACTIVITIES
Program development—Consortium agencies provide input into Phase IV activities	1. Prepare rationale, define roles, identify competencies 2. Set criteria for entry level 3. Make suggestions and/or design learning experiences 4. Identify needed resources

PHASE V	ACTIVITIES
State Board approval—Request from policy board	Arrange site visits and program review by State Board of Education and Superintendent of Public Instruction

PHASE VI	ACTIVITIES
Program implementation—Policy board assigns coordinating responsibilities for components of the program to one of the three consortium agencies	1. Operationalize selection criteria 2. Operationalize college and field program components 3. Coordinate learning activities 4. Evaluate student progress 5. Recommend certification

PHASE VII	ACTIVITIES
Certification—Policy board makes decision or assigns responsibility to appropriate agency	Superintendent of Public Instruction issues certificate

PHASE VIII	ACTIVITIES
Program evaluation—Informal annual evaluations. Policy Board assigns responsibility for comprehensive evaluation to appropriate agency	1. Evaluation on annual basis—informal 2. Comprehensive formal evaluation once every three to five years

In practice the various phases of development overlap. However, the policy board of the consortium becomes the primary coordinating and decision-making body in the implementation and development of competency-based educational programs.

Certification Under the Consortium Structure

Three and one half years after the adoption of the 1971 *Guidelines and Standards* the State Board of Education reported that 16 different consortia in the state of Washington had received approval to develop and implement programs under the new certification design. One-half of the programs (8) were to prepare school counselors. This is not surprising since school counselors were the first group affected by the new certification design. Under the fourth draft of the *Guidelines and Standards*

(September 1968) school counselors were asked to initiate planning for the certification of counselors. October 1973 was set as the target date for certification of all public school personnel employed as school counselors. By the end of 1972 six out of the above mentioned eight programs for counselors were approved for certification at all three levels of certification, Preparatory, Initial, and Continuing.

Of the remaining eight consortia in operation in the state of Washington, in December 1974, two were involved in the development of elementary teacher education programs and one each were concerned with preparatory programs for psychologists, foreign language teachers, communications disorders specialists, social-workers, occupational therapists and physical therapists.

Sixty-eight potential consortia have been identified in the state of Washington. It is anticipated that programs will continue to be presented for approval as the various consortia complete their work of planning for implementation and development.[25,26,27]

Part II of this volume, Chapter VII through Chapter XI, will present illustrative module clusters developed and field tested as components of particular inservice and preservice teacher education programs. Chapter VII will review the CBTE approach as it was introduced to inservice teachers participating in a Teacher Corps demonstration project. Two module clusters, developed through this project involving both elementary and secondary teachers, are included.

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PART II

Illustrative Module Clusters

CHAPTER VII

CBTE: A VIABLE APPROACH TO INSERVICE EDUCATION

— VII —

CBTE: A VIABLE APPROACH TO INSERVICE EDUCATION

Illustrative Modules:

"Improvement of Reading in the Content Areas"
Lillian H. Franc and Glenna J. Mize

"High Incidence Handicaps"
Clyde W. Shepherd

The CBTE approach as used in a Teacher Corps demonstration inservice staff development project will be presented in this chapter. A description of the school setting and a brief review of school-college relationships will be followed by a discussion of the competency-based component of the inservice instructional program of the Keene State/Marlborough, New Hampshire Teacher Corps Project. Examples of modules developed for the program will be presented.

THE SCHOOL SETTING

The Marlborough School District is located in the heart of rural New England. The elementary and secondary school buildings adjacent to one another, house all four hundred students taught by ten elementary school teachers and sixteen secondary teachers. In addition various aides and administrative personnel plus four graduate interns in teaching (two at the elementary school level, two at the secondary level) make up the instructional staff.

SCHOOL-COLLEGE RELATIONSHIPS

Several teachers on the Marlborough faculty had taken previous course work at Keene State College either as undergraduate or graduate students. Generally the school-college relationship ended there. Thus for some Marlborough teachers, the Teacher Corp Project with its emphasis on on-site instruction and field orientation was viewed as a foreign element invading professional privacy at Marlborough. As the first Teacher Corps project in the State of New Hampshire, teachers entered the Teacher Corps professional development activities somewhat reluctantly.

As a demonstration project Teacher Corps inservice courses were to be designed in response to teacher-perceived needs for professional development. According to the original model specifications, the competency-based approach was to be used where feasible.[1] While the college had not endorsed CBTE as part of the Keene State teacher education program it cleared the way to introduce CBTE within the limited scope of the Keene-Marlborough Teacher Corps Project. Courses or segments of courses adaptable to the CBTE format would be offered at least in part in the CBTE mode.

College instructors to be included in the delivery of inservice professional experiences through the Teacher Corps Project in general agreed that it is most critical that teachers share to some extent the selection and subsequent planning of professional development experiences. For teachers to have a commitment to instructional improvement they must plan their own destiny. Appropriately implemented CBTE could provide shared responsibility in the designing of personalized and individualized learnings for inservice teachers.

AN OVERVIEW OF THE KEENE/MARLBOROUGH INSERVICE INSTRUCTIONAL PROGRAM

One way to begin a responsive teacher education program is to give teachers an opportunity to define professional concerns or problem areas within their own teaching setting. Accordingly, the Keene/Marlborough Teacher Corps Project's instructional program for teachers began with a tentative listing of teachers' concerns developed by a nine member teacher program advisory committee (TPAC) working in conjunction with college personnel. All teachers were then given an opportunity to respond to the listing during taped individual interviews carried out by the program developer. The interview tapes were analyzed to identify common professional problems.[2] These concerns served as a base for the identification of the overall competency-objectives included in the design of the inservice instructional program. Course offerings, workshops and conferences as well as on site technical assistance were designed to give teachers a choice among several modes of program delivery.

Individualization and personalization of instruction was continued within each professional experience provided. College instructors and teachers worked together on field-oriented projects selected by the teacher to be carried out in his/her own classroom setting. However, projects were also related to theoretical frameworks through weekly lecture-discussion sessions as well as outside readings. Courses, workshops, and technical assistance were all offered at the school site.

Progress on project development was monitored through written and oral reports as well as personal conferences between teachers and college instructors. Conferences were generally carried out with each teacher at least once during each five week modular term.[3] With continuing communication and careful monitoring varying levels of entry skills were more readily accommodated. As one might assume, teachers in the program came from diverse backgrounds of preparation, experience and professional potential.

The modular format described as a characteristic of CBTE programs was used for units or modules within courses for which the format was appropriate.

Pilot modular units developed in the Keene/Marlborough Teacher Corps Project were field tested and revised as continuing feedback was received from the teacher-learner. These modular units were eventually made available to other Keene State College instructors working with both preservice and inservice teachers. Additional field testing in this second teaching-learning environment is suggested.

At Marlborough, the elements of personalization and individualization have been fostered throughout all professional experiences provided for teachers: in course focus, in course development, in the decision to participate in the program itself. What then were the concerns of teachers with respect to CBTE?

BARRIERS TO IMPLEMENTATION

Language itself became a formidable block in the acceptance of CBTE as a vehicle for continued professional development. Seeking competence carried for many teachers a negative connotation; it implied the lack of competency. The question became "In my efforts toward competency am I implying a personal lack of competency?" In all inservice professional development programs using the CBTE approach attainment of competency must be divorced from the notion of lack of competency. Instead, a focus on professional development experiences for all educators as a natural progression toward increased competency over the span of entire careers must be nurtured. Teachers need to be assured that in seeking competency one may select such diverse aspects of teaching and learning as the broadening of one's conceptual base, the refining of existing teaching skills and procedures or the study of students' learning styles. The emphasis will focus on a personal growing edge—competency beyond already attained competency.

Accountability for changes in student behaviors was also often an equally legitimate concern of teachers expressed in questions such as, "How can I do anything about Rick's lack of interest in social studies if he can't read the social studies materials?" "Patricia is in school only two days out of five, how can I be expected to teach her?" This is of course the process/product question. One may argue that changes in teaching process that fail to influence student attitudes or learnings are not carrying out the ultimate purpose of instruction. However, teachers need to be assured that they cannot be held responsible for all student lack of progress. Teachers do need to know that some competencies can be assessed in terms of student behaviors, others in terms of teaching process, still others as a combination of both teaching process and resulting student behaviors.

GUIDELINES

In the following section practical guidelines for initial steps in the development of CBTE programs at the inservice level are presented. The role of the teacher-educator is considered. Teacher input into the designing of professional experiences is reviewed.

Identification of instructors in higher education who are willing to explore the possibilities within CBTE is a critical step in the development of the instructional program. As experienced in the Keene/Marlborough Teacher Corps Project all instruction provided need not be offered within the competency-based format, however. To develop an instructional module using the CBTE format takes rigorous thought focused on such components as the selection of competencies, modes of development, and assessment procedures. Instructor time may best be used in terms of selected modules carefully conceptualized, field tested and refined.

In addition, as noted earlier not all aspects of teaching and learning are readily adapted to a CBTE approach. For example, teaching competencies focused on attitudes and values at least in the initial stages of a program, may best be dealt with in ways other than the direct approaches characteristic of CBTE. Then too, moving into a "total" CBTE program may serve only to close off the possibility of using CBTE as a vehicle for program delivery because teachers themselves are not ready to move into such a professional development program. Listening to the concerns and questions of teachers is crucial in order to insure teacher participation in the evolving program. There is no substitute for the sensitive awareness of specific teacher needs within a given school setting.

It is important to be aware that under most circumstances teachers prefer not to be responsible for the complete design of their own professional education experiences. Most teachers have neither the time nor the inclination nor the talent to do so. There are, however, some aspects of the inservice program design where teacher input is essential. Among them are the identification of competency-objectives to be developed, the selection of related learning experiences and the determining of assessment procedures. One can only suggest here that all instruction start in terms of teachers' perception and readiness. Self assessment survey instruments can be helpful in this respect. In addition, personal interviews between instructor and teachers focused on the identification of problems being faced in the classroom setting can be fruitful. Setting the direction for instruction and focusing on mutually selected generic teaching competencies generalizable to varying teaching/learning situations may be costly in terms of time and effort. It can, however, make a difference in the quality of the inservice program provided.

In the following sections of this chapter, two CBTE module clusters are presented. Both were carried out within a single five week modular time frame. Both were conceived in response to perceived needs of teachers, field tested and subsequently revised. The module cluster, "Improvement of Reading in the Content Areas" was carried out during the last of three five-week sessions in an introductory course in reading primarily for secondary classroom teachers. The exceptional child module "High Incidence Handicaps" was used in the second five week segment of three five-week modular sessions. Differences in style and format reflect differences in individual instructor conceptualization of the CBTE approach.

Instructors reported that the inservice teachers' interest and involvement remained high during the completion of the selected learning experiences. Timing of the introduction of the CBTE modules into the inservice program appeared to be an important positive factor. Teachers were ready to accept the CBTE format when these modules were introduced into the instructional program. The two modules selected for inclusion in this chapter reflect areas of major professional concern for teachers, administrators and parents in the Marlborough School District.

The two module clusters follow. The chapter concludes with the instructor's personal commentary on the development and implementation of the CBTE module cluster, "High Incidence Handicaps."

IMPROVEMENT OF READING IN THE CONTENT AREA

INTRODUCTION

This module cluster "Improvement of Reading in the Content Area" consists of four modules:

(I) Identifying Skills Essential to Reading in the Content Area: Applying Selected Skills in the Design of a Teaching-Learning Activity

(II) Preparing Readers to Read Content Materials
(III) Developing Vocabulary Skills
(IV) Using Graphic Materials

All students were required to carry out Module I and II. Students were given an option to complete this module cluster using either one or both of the remaining modules, Modules III and IV.

Prior to working with the modules, students had taken two single credit sequences in the teaching of reading (1) Nature of Reading and (2) Basic Skills in Fostering Comprehension in Reading. The class group was predominantly made up of secondary inservice classroom teachers. In addition four teaching interns (two secondary, two elementary) carried out this module cluster.

In the field testing of this module cluster, the teacher/learners found that the module could be adapted to both the secondary and elementary classroom setting. In addition they found it flexible enough to meet the need for improvement of reading in a variety of content areas. The module cluster has been adapted to such diverse content areas as math, music and biology.

When given the option to select one of the two concluding modules, (III Developing Vocabulary Skills and IV Using Graphic Materials) students at both the elementary and secondary levels tended to select vocabulary development. However, several students perceived the interrelationship of Modules III and IV and chose to carry out both modules.

This module cluster resulted in a wide diversity of teaching/learning activities. Thus it would appear that this module can be adapted to a variety of teaching styles as well as a broad spectrum of content areas.

During the field testing of this module cluster the students' application of a background of knowledge and understanding in the teaching of reading was evidenced. With such a background students had no difficulty in implementing the module cluster.

GENERAL OBJECTIVE OF THE MODULE CLUSTER

The purpose of this module cluster is to give teachers practice in specific teaching strategies related to student improvement of reading in the content areas.

PREREQUISITE OF THE MODULE CLUSTER

Students will have had two credits in the teaching of reading: (1) Nature of Reading and (2) Basic Skills in Fostering Comprehension in Reading.

IMPROVEMENT OF READING IN THE CONTENT AREAS

MODULE I

I. Identifying Skills Essential to Reading in the Content Areas and Applying Selected Skills in the Design of a Teaching-Learning Activity.

Objective

The student will be able to identify skills essential to reading in the content areas based on information from outside readings, and class lectures and discussion. In addition the student will incorporate one or more of the identified skills in a planned teaching procedure. Competence in these areas will be said to have been demonstrated when the student is able to design a teaching/learning activity using one or more of the skills identified.

Preassessment

None

Prerequisite

Students will have had two credits in the teaching of reading: (1) Nature of Reading and (2) Basic Skills in Fostering Comprehension in Reading.

Instructional Activities

The following learning activities will be available to the student:

1. Attend lecture discussion session(s) on basic reading skills in the content area.
2. Read at least one selection from a bibliography of reading in the content areas other than the text.
3. List at least three essential skills needed for reading in in the content areas.
4. Design a teaching-learning activity for a given content area focusing on one or more of the identified skills. Include an evaluative procedure.

Post Assessment

Completion of a design for a teaching-learning activity utilizing one or more of the identified skills.

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IMPROVEMENT OF READING IN THE CONTENT AREA

MODULE II

II. Preparing Readers to Read Content Material

Objective

The student will be able to use at least one teaching strategy to prepare the student to read content material. Competence will be said to have been demonstrated when the student is able to report results in terms of specific indicators included in an evaluative process.

Prerequisite

Completion of Module I of this module cluster.

Preassessment

None

Instructional Activities

The following learning activities will be available to the student:

1. Attend lecture discussion session(s) on preparing readers to read in the content areas.
2. Read at least one selection from a bibliography of reading in the content areas.
3. Use a teaching learning activity designed by the student in Module I to prepare readers to read content materials.
4. Evaluate results over a two week period.
5. Report the results of findings in written form or on a video tape.

Post Assessment

Completion of a report based on results of the use of at least one teaching strategy in the preparation of readers of content material.

IMPROVEMENT OF READING IN THE CONTENT AREA

MODULE III

III. Developing Vocabulary Skills

Objective

The student will be able to use one or more teaching procedure(s) to aid the learner in developing vocabulary basic to a given content area. Competence will be said to have been demonstrated when the student is able to report results in terms of specific indicators included in an evaluative process related to the teaching procedure(s).

Prequisite

Completion of Module I and II in this module cluster.

Preassessment

None

Instructional Activities

The following learning activities will be available to the student:

1. Attend lecture discussion session(s) on teaching strategies for the development of vocabulary basic to reading in a given content area.
2. If appropriate extend the learning activity designed in Module I to include teaching procedures for developing basic vocabulary.
3. Alternative to item 2 above: Design a teaching/learning procedure intended to aid your students in developing basic vocabulary in a given content area.
4. Include in items 2 and 3 above specific indicators to be used in evaluating the results of the teaching/learning procedure.
5. Report evaluative results.

Post Assessment

Completion of a report on the use of one or more teaching/learning strategies as. aids to developing basic vocabulary in a given content area.

IMPROVEMENT OF READING IN THE CONTENT AREA

MODULE IV

IV. Using Graphic Materials

Objective

The student will be able to use one or more teaching procedure(s) to aid the learner in developing skill in the use of graphic materials for improving reading in a given content area. Competence will be said to have been demonstrated when the student is able to report results in terms of specific indicators in an evaluative process related to the specific teaching procedure(s).

Prerequisite

Completion of Modules I and II of this module cluster.

Preassessment

None

Instructional Activities

The following learning activities will be available to the student:

1. Attend lecture discussion session(s) on teaching strategies for the use of graphic materials for improving reading in a given content area.
2. If appropriate, extend the learning activity designed in Module I to include teaching procedures for using graphic materials as an aid to communication in reading.
3. Alternative to item 2 above: Design a teaching/learning procedure intended to help the learner to use graphic materials as an aid to communication in reading.
4. Include in items 2 and 3 above specific indicators to be used in evaluating the results of the teaching/learning procedure.
5. Report evaluative results.

Post Assessment

Completion of a report on the use of one or more teaching strategy(ies) related to the improvement of reading in the content areas through the use of graphic materials.

HIGH INCIDENCE HANDICAPS: LEARNING DISABILITIES, MILD EMOTIONAL DISTURBANCE, EDUCABLE MENTAL RETARDATION

INTRODUCTION

This module cluster will focus on characteristics of children with learning disabilities, mild emotional disturbance and educable mental retardation. Concepts of etiology and developmental dynamics, techniques for therapeutic intervention, including educational modifications, child and family counselling and behavior-control medication will also be reviewed. The relation between these handicaps and deprivation will be stressed throughout.

GOALS

Students will:

1. Develop working definitions of learning disabilities, emotional disturbance, behavior disorders and mental retardation.
2. Acquire a knowledge of the characteristics of children with LD, ED and MR.
3. Acquire a knowledge of the etiological factors of LD, ED and MR.
4. Understand the range of special educational options for LD, ED and MR children.
5. Acquire an awareness of the types and purposes of counselling for both the mildly handicapped child and his family.
6. Acquire a knowledge of the behavior control medications frequently used with LD, ED and MR children.
7. Develop an awareness of the importance of cultural factors as influences in retarding intellectual and emotional development.
8. Others as generated by the student.

PRE-ASSESSMENT AND INDIVIDUAL PLANNING

Each student will take a seven-part pre-test, each part corresponding to the submodules described below. Each part will consist of 10 multiple-choice questions and one essay question. As a follow-up, each student will be interviewed by the instructor using a partially structured interview guide. The purposes of the interview will be to determine more precisely the entrance level of each student and to negotiate an individual contract of objectives for each student. Those students who demonstrate mastery of the content of submodules will incorporate into their contract more advanced modules.

SUBMODULE I

Objective and post assessment procedure

The student will be able to explain and use correctly the terms listed below; this to be demonstrated by the student using the terms correctly orally and in written form, by responding correctly to questions relating to the terms and by giving the meaning of the terms using his own vocabulary. Each student will be interviewed to identify the level of sufficiency attained and to determine whether "remedial" work is necessary.

Instructional activities:

(1) Read chapters 10, 12 and 7 in *Psychology of Exceptional Children and Youth*, third edition, by Cruickshank and Chapter I in *Teaching the Learning Disabled* by Bill Gearheart (or equivalent material).
(2) Participate in class discussions on the concepts and vocabulary of the fields of ED, LD and MR.
(3) Listen to the tape: *Introduction to Children with Learning Disorders*, Paul S. Amidon & Associates, Inc.
(4) Other activities as developed by the student.

SUBMODULE 2

Objective and post assessment procedure

The student will be able to identify the characteristic behavior symptoms and syndromes associated with LD, ED and MR children; this to be demonstrated through written descriptions of observations of the behaviors and characteristics of children representative of the above categories, and through discussion of case studies presented by the instructor.

Instructional activities:

(1) Read part 1, Introduction of *Mental Retardation* by Chinn, Drew and Logan, Chapter 1, the Nature of Mental Retardation in *Mental Retardation; Nature, Causes and Management* by George Baroff, view IRS tape H-519, *Troubled Campers*, the film, *You're Not Listening*, and the film, *Who is this Child?*
(2) Participate in class discussions on the characteristics of LD, MR and ED children.
(3) Other activities as developed by the student.

SUBMODULE 3

Objective and post assessment procedure

The student will be able to identify the range of causes of LD, ED and MR; this to be demonstrated through a written description of the probable etiology of three cases presented by the instructor, and also through follow-up discussion of these cases.

Instructional activities:

(1) Complete lesson Seven, Etiology of Mental Retardation in *An Introduction to Mental Retardation* by Ehlers, Krishef and Prothero.

(2) Read Chapter 10, Moderate and Mild Emotional Disturbances in *Teaching The Exceptional Child* by L'Abate and Curtis.

(3) Participate in class discussions on the causes of LD, ED and MR.

(4) Other activities as developed by the student.

SUBMODULE 4

Objective and post assessment procedure

The student will be able to identify various placement and instructional options and be able to match programs with child characteristics; this to be demonstrated through a written program and placement prescription for three cases presented by the instructor and also through discussion of the efficacy of their choices.

Instructional activities:

(1) Read *Teaching to Specific Learning Disabilities*, Shepherd.

(2) View film *Children and Language Disorders*, Part II: Treatment.

(3) View film *Help Techniques of Remedial Reading*.

(4) Read Chapter 7 Adapting to Individual Differences in *Individualized Instruction, Every Child a Winner*—by Noar.

(5) Participate in class discussions on options in providing special education services.

(6) Other activities as developed by the student.

SUBMODULE 5

Objectives and post assessment procedures

(1) The student will be able to describe in writing the counselling model of Carkhuff.
(2) The student will become aware that many common ways of responding are not helpful and will come to recognize the major characteristics of helpful responses.
(3) The student will learn to perceive accurately surface and underlying feelings from written counselling situations.

Instructional activities:

(1) Read material provided by the instructor on Carkhuff's model.
(2) View IRS—H681 *Child Behavior—You.*
(3) Respond to problematical counselling situations presented in class.
(4) Other activities as developed by the student.

SUBMODULE 6

Objectives and post assessment procedures

The student will be able to identify the criteria for administering behavior-control medication and the expected behavior change resulting from the child taking cortical stimulant, anti-convulsants and tranquilizers.

Instructional activities:

(1) Listen to audio-tape of Dr. Freeman describing the effects of ritalin and dexedrine.
(2) Talk with the parents and/or teachers of two "hyperactive" children and ask their impressions of behavior change.
(3) Read *Pills for Classroom Peace* from Saturday Review (provided by Instructor).
(4) Participate in class discussions on the efficacy and ethics of behavior-control medication.
(5) Other activities as developed by the student.

SUBMODULE 7

Objectives and post assessment procedures

The student will learn the impact of severe deprivation upon the child's development and the efficacy of compensatory programs of intervention (e.g. Head Start). The objective will be determined through class discussion, and, at individual student's choice, through a written case study of a deprived child.

Instructional activities:

(1) Read *Compensatory Programming: The Acid Test of American Education* by Frost and Rowland and *Those Children* by Clark, Goldsmith and Pugh.
(2) Interview a social worker and ask about how being poor and deprived retards emotional and intellectual development.
(3) Visit a Title I program—ask how they assess progress of the children.
(4) Participate in class discussions on the effects of deprivation upon individual children and the utility of compensatory programs.
(5) Other activities as developed by the student.

SUBMODULE 8

Objectives and post assessment procedures

The student will identify at least one area of interest, write appropriate objectives, develop instructional activities, and demonstrate successful fulfillment of the objectives. All this to be done in consultation with the instructor.

A RESPONSE TO INITIAL FIELD TESTING OF MODULE: HIGH INCIDENCE HANDICAPS: LEARNING DISABILITIES, MILD EMOTIONAL DISTURBANCE, EDUCABLE MENTAL RETARDATION

This module was developed around traditional content from courses in mental retardation, learning disabilities and emotional disturbance. Subtopics were translated into competencies the students were to achieve. Additional competencies were negotiated with individual students during a semi-structured initial interview. Each student wrote a contract which incorporated the basic goals and added their own. The module cluster focused on characteristics of children with learning disabilities, mild emotional disturbance and mental retardation. In this review of the initial field test of the module, several areas seem important:

—Criteria for goal setting (content justification)
—Preassessment procedures
—Individual planning and learning
—Post assessment procedures
—Use of class time
—Use of media
—Refinements

Goal Setting

During the past decade, courses in mild cognitive and emotional handicaps have become relatively standardized topically. Content reflects the factual and conceptual as well as attitudinal aspects. There is concern about definitions of handicaps and about causes, prognoses and techniques for facilitating development.

The concepts of counselling seem to be valuable for those working with mild handicaps because self-concepts of such children are generally inaccurate and depressed. Counselling styles presented in this module included those described by Rogers, Axline, Carkhuff, and both the behavioral strategies collectively and the various art-oriented therapies. The literature on the efficacy of parent counselling was also reviewed. In addition, the curriculum included sections on behavior control medication (including dexedrine, ritalin, the anticonvulsants, tranquilizers, etc.) and on the ethics of behavior-control medication.

Generally, those enrolled felt that the basic curriculum was relevant to their interests and professional needs. For those who wanted something different, modifications and additions were made by negotiations.

Preassessment Procedures

As indicated in the module, a multiple choice pre-test was given. This pre-test did not influence evaluation of students work but served as a basis for deciding on a pattern of study for each student. Interviews were held to gather information on each student's background and aspirations.

Individualized Planning and Learning

In addition to the module description, each student had access to his pre-test score. These provided a framework for course content and a basis for an individual contract. Each student wrote an educational plan in competency-based language which then was reviewed and negotiated with the teacher. In this planning session, the student expressed the letter grade to which he aspired. Standards were set according to the following guide:

Grade of C: Demonstrate proficiency in or attainment of the basic goals for the module as personalized in the contract.
Grade of B: Earn a C and read about 5 books and 20 articles summarizing each in writing.
Grade of A: Earn a B and complete a major paper or project—approved by the instuctor in advance.

Post Assessment Procedures

Whereas the preassessment test covered all modules, post assessment occurred during and after each submodule. Also, there was a post-test after the completion of all modules. although the pre and post tests have questionable reliability and validity all students acquired the basic skills and understandings. However, it seems that so much monitoring detracts from instructional time. Specific comments on the eight basic goals and the students' success in achievement follow:

1. Develop working definitions of learning disabilities, emotional disturbances, behavior disorders and mental retardation: Every student mastered this goal at 90% or higher proficiency.
2. Achieve a knowledge of the characteristics of children with learning disabilities, emotional disturbance and mental retardation: Every student became familiar with the three or four most common symptoms and syndromes associated with mildly handicapped children. This was accomplished through discussion of representative cases.
3. Acquire a knowledge of the etiological factors of learning disabilities, emotional disturbance and mental retardation:

Every student mastered this objective at 90% or higher proficiency.

4. Understand the range of special educational options for learning disabled, emotionally disturbed and mentally retarded children: This submodule was effective from the standpoint of providing practice in judgment about placement and programs. However, pre-test and post-test criteria were found to be difficult to formulate. Subjectively evaluated, every participant became more skilled in making proper referral and placement decisions.
5. Acquire an awareness of the types and purposes of counselling for both the mildly handicapped and his family: While the instructor's intention was to utilize the Carkhuff model, mastery of the concepts seemed elementary and much time was devoted to shortcomings of this approach. The differences in actual behavior implied by this model were re-emphasized.
6. Acquire a knowledge of the behavior control medications frequently used with learning disabled, emotionally disturbed, and mentally retarded children: Every student mastered this objective at 90% or higher proficiency. Considerable time was devoted to the ethics of administering medication to modify behavior. The results of these discussions were difficult to monitor in that each participant decided upon an appropriate procedure and criteria for the use of behavior control medication.
7. Develop an awareness of the importance of cultural factors as influences in retarding intellectual and emotional development: This submodule involved the acquisition of awareness of how deprivation can impede physical, emotional, and intellectual development. Each student devised a project such as reading, visits, etc. to share with the class.
8. Others as generated through specific negotiations with each student: These were incorporated within each student's individual contract.

Use of Class Time

About one-third of class time was devoted to lectures or taped presentations of factual material. For example, syndrome descriptions, evaluation instruments and procedures and representative cases were presented. The remaining time was spent in discussion of assigned topics. Discussion of relevant issues was particularly encouraged with the instructor acting as facilitator, asking participants to describe their understanding of issues with subsequent refinement of their conception through questioning. The discussions were neither Socratic (the instructor asking semi-rhetorical questions to expose ignorance) nor Rogerian (feelings and opinions were not allowed to masquerade as facts). Alternate hypotheses were explored followed by synthesis and summarization. Often new hypotheses and new syntheses would be generated.

Use of Media

Although video and audio taped presentations were used in class, along with print media, a logistical problem existed regarding the very promising possibilities presented by the college's information retrieval system. This system allows the individual viewing of films and videotapes through monitors attached to central videotape playback equipment. Since Teacher Corps projects are centered in the cooperating school, the IRS was not easily available. However, many of the students frequently went to the college to view assigned material.

Refinements

Good teaching and effective learning involves skill development as well as spontaneity. Competency-based programs are important in that they allow monitoring and accountability but equally important is balanced judgment which seems to occur most frequently through semi-controlled and directed discussion. The fundamental characteristics of this module were sound. General course objectives, a pre-test, post-test format, "homework," balanced classes of lecture-discussion, individually negotiated contracts, and a non-competitive evaluation system. A few modifications suggest themselves:

—two 1½ hour meetings per week instead of one 3 hour meeting
—more intelligent pre- and post test assessment for the general course goals
—more readily available media and materials
—more release time, provisions for interviews and visits

NOTES

1. Keene State College-Supervisory Union 29, Marlborough, New Hampshire, "New Hampshire Model for Constructive Change in Preservice and Inservice Teacher Education," Keene State College, 1976.
2. Thirty-one interviews were taped. In addition six teachers interviewed preferred not to have their interview recorded but were willing to have information from their interviews summarized in a written account.
3. The time frame for credit bearing courses was broadly conceived as a five week term to an instructional module and one graduate credit. Teachers chose from various credit options within a course depending on how many modules they carried out. Thus within a given course framework teachers opted for one, two or three credits related to the number of modules selected.

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Keene State College-Supervisory Union 29, Marlborough, New Hampshire. "New Hampshire Model for Constructive Change in Preservice and Inservice Teacher Education," Keene State College, 1976.

— VIII —

A RATIONALE FOR THREE PRESERVICE ILLUSTRATIVE MODULE CLUSTERS

Chapter III of this volume discussed in detail the need for identification of basic competencies as crucial to the development of the instructional component of CBTE programs. Various procedures for identification were presented; among them the use of professional judgment and past experience, the analysis of curricular materials, and the study of teaching roles. The need for the development of a research base for the support of selected competencies was noted.

This chapter will present a general rationale for the selection of competencies and for the development and sequencing of the modules included in the three illustrative module clusters introduced in the following chapters (Chapters IX, X, XI). The exploratory study of problems of third-year teachers from which the competency selection was made will be described.

A rationale which deals more specifically with the linkage of selected competencies to current research and literature about teaching and learning is included at the beginning of each illustrative module cluster.[1] For the student carrying out the field-centered module clusters the specific rationale serves as an introductory statement for each modular sequence. Thus the general rationale presented in this chapter focuses on how and why the illustrative modules were developed; each specific introductory rationale links given competencies to related literature and research.

PROBLEMS OF THIRD-YEAR TEACHERS: A BASE FOR IDENTIFYING COMPETENCY OBJECTIVES

"Instead of a one way flow, the concept of partnership involves a continuous cycle in which all of the partners have a mutual influence on one another as they perform their major functions of research and development, field testing and evaluation and installing new practices in schools."[2] So states Dean Corrigan in a discussion of the meaning of partnership in education. The need for a reciprocal flow of information between persons involved in the design and implementation of teacher education programs and school personnel linked to cooperative field settings is indeed crucial. It would appear that if competencies selected as a basis for developing preservice and inservice teacher education programs are indeed to be relevant to the teacher-practitioner, input from field settings must be sought out. In a critique of nine models for preparing elementary school teachers James Cooper states,

> "In most models . . . it was much easier to specify the programs from a preservice point of view . . . The inservice level was a lot foggier . . . It was very hard to describe in advance an attack on the inservice component."[3]

This is not to say that input from field settings is to become the only source of data for the identification of competency-objectives. Other factors as outlined in Chapter III should and must be considered.

Nevertheless on the assumption that information from the field setting does provide a valued dimension in the development of teacher education programs, the competency-objectives which served as a base for the three illustrative module clusters presented in the following chapters were linked to findings from an exploratory study of Problems Perceived by Ninety Two Third-Year Teachers (Part I) carried out by this writer.[4] This study was a follow-up of an earlier research study of Problems of Seventy-Five Beginning Elementary School Teachers.[5]

Review of an Exploratory Study of Problems Perceived by Ninety-Two Third-Year Teachers

The first-year and third-year teacher studies were carried out in the same school district, a school system employing over 2,500 teachers, serving over 50,000 pupils and identifiable as one of thirty-two such metropolitan school districts in the continental United States.[6]

Four research questions served to focus the four-part investigation carried out in the third-year teacher study. Each part of the follow-up study was linked to findings obtained in the original study of problems perceived by beginning teachers. Each of the four research questions served as a basis for a major section of the study. However, for the purposes of this chapter, only Part I of the four-part investigation will be outlined. Part II, III, and IV of the study did not yield data directly related to the development of the modular clusters.

Part I of the study focused on the following research question:

> What problems perceived by first-year teachers are also identified as persistent problems by third-year teachers?

This question appeared to be appropriate for obtaining valid data to be used in the identification of teaching competencies needed at both the inservice and preservice levels. As pointed out by Corrigan, "The major educational challenge facing this country in the next five years is to reeducate 1½ million experienced teachers, and it cannot be done between 8:00 and 8:30 in the morning or between 4:00 and 5:00 in the afternoon."[7]

Further it appeared important to identify *persistent* problems of the more experienced teacher rather than to focus upon problems of first-year teachers which would be cancelled out by on-the-job experience. Teachers completing their third year of teaching would have had time to gain some perspective into their early problems associated with initial induction into the profession. In addition, after three years in the profession, teachers are more likely to be contributing more fully to the functioning of the total school. Yet, many may still be evolving a personal teaching style, still seeking out innovative teaching strategies, still not ready to accept "the way it is." Their perceptions of persistent professional problems could provide important data to be used in the design of instructional programs for the career teacher as well as for the prospective teacher candidate.

A fifty-five item objective questionnaire was developed as the primary data-gathering instrument for Part I of the third-year exploratory study. Each item in the questionnaire posed as a potential problem for third-year teachers had been identified as a problem for first-year teachers in the earlier study of problems perceived by seventy-five beginning elementary school teachers. Further, each item included in the third-year study concerning either instruction or control and attention, had been linked by the beginning teachers to a perceived need for the development of teaching competency. The questionnaire for the third-year study was pretested with thirty-two third-year teachers who were also graduate students at Queens College, City University of New York. The questionnaire was subsequently revised in wording and simplified in format. The number of items remained at fifty-five.

The target population for the study included elementary school teachers, kindergarten through grade six, completing their third year of teaching in one of 133 elementary schools in an urban school system and responsible for their homeroom class at least one-half of each school day. Principals in one hundred twenty-five of the 133 schools (93.9%) responded to a preliminary inquiry concerning the identification of third-year teachers. Thus 120 third-year teachers from 60 schools were identified as potential participants. Of this number 92 (76.8%) responded to the questionnaire and became the actual sample of subjects for the investigation.

For the purposes of this chapter, results of Part I of the study will be discussed in terms of their relationship to the development of the illustrative modules included in Chapters IX, X, and XI.

An analysis of responses to each of the 55 items included in the questionnaire indicated that 40 per cent or more of the respondents perceived themselves as having problems either most of the time or fairly often in 15 prespecified problem areas. Each of the 15 problem areas had potential to provide the basis for the identification of teaching competencies from which modular instructional materials could be developed. A summary of responses to these fifteen areas is presented in Table IV. Items from which competencies for the three illustrative module clusters were derived are in italics.

TABLE IV

Fifteen Areas Most Frequently Perceived as Problems by Third-Year Teachers

Problems Perceived	Frequency (Most of the time and/or fairly often)	Per Cent
Developing the child who appears to be a non-learner.	52	56.5
Organizing individual learning experiences.	50	54.3
Gaining parent cooperation in helping with children having learning problems.	49	53.2
Diagnosing reading difficulties.[8]	45	48.9
Providing learning activities that take into consideration individual rates of learning.[9]	45	48.9
Enabling parents to understand their responsibility for helping with their children's school problems.	45	48.9
Motivating the child who does not "like" a certain subject.	44	47.8
Explaining a difficult concept to a group of children so each learner will understand.[10]	43	46.7
Pacing my teaching so as to accomplish end of the year goals in reading.	43	46.7
Reaching so many personalities in the classroom.	40	43.4
Gaining parent cooperation in helping with children having problems in control.	40	43.4

Pacing my teaching so as to accomplish end of the year goals in social studies.	39	42.3
Initiating separate group activities in social studies.	37	40.2
Selecting "appropriate" curriculum for various pupils.	37	40.2
Eliminating excessive talking.	37	40.2

DESIGNING AND IMPLEMENTING THE INSTRUCTIONAL MODULES

Having identified needed areas of competence using the findings from the third-year teacher study as a base, objectives related to the identified teaching competencies were conceptualized. As outlined in Chapter III each objective was stated so as to indicate the competency to be demonstrated, the conditions under which the competency was to be demonstrated, and the criteria to be applied in assessing the student's attainment of the stated objectives.

Prerequisites, pre-assessment procedures, instructional activities, post assessment procedures and remediation were additional elements included in each module. Seven criteria considered in the conceptualization of the learning activities to be carried out by the student in relation to the development of given competency-objectives have been presented in Chapter IV.

It is important to note that in the actual field testing of the modules, the prospective teachers were able to implement the modular sequences within the on-going classroom instructional program whether at the kindergarten, primary, or upper elementary school levels. Every module was used successfully in open classroom settings as well as in more structured situations. In several instances the module cluster served as a springboard for students who, with guidance, were able to plan and to implement their own professional learning experiences. This was particularly evidenced in relation to the illustrative module clusters in language arts and in the social studies.

The Role of the Classroom Supervising-Cooperating Teacher

The classroom supervising-cooperating teacher, the student, and the college supervisor all participated significantly in the implementation and, to a more limited extent, the design of the instructional modules. Each contributed to the development of the preactive, interactive and post active aspects of teaching as the student experienced the module cluster in the field setting. Individual roles and responsibilities of the supervising teacher, the student and the college supervisor are briefly discussed below.

The supervising classroom teacher carried three major roles in the implementation of the module cluster. Although the modules were broadly designed to fit the overall instructional program in three field settings, it was the supervising teacher who helped to allocate time and space for students to carry out each modular teaching sequence. For most students securing time and space to implement modules was not a problem.

Evaluation of the students' actual development of the module was carried our cooperatively by the supervising teacher and the student. Each module included a supervisory summary sheet which was signed by the cooperating teacher and submitted by the student to the college supervisor together with each completed module. The summary sheet not only served as one resource for the evaluation of student progress but became an integral part of the continuing communications system among the supervising teacher, the student and the college supervisor. Further, in most instances the review of the summary sheet by the supervising teacher and the student led not only to the initiation of necessary remediation procedures but frequently spurred the student to extend a given module through planned practice of the modular sequence as it related to other content areas. Planning of individual differentiated personal learning activities by the prospective teacher was also evidenced as an outcome of supervising teacher-student summary reviews, thus providing for the student further opportunity to personalize his learning experiences. Prior to implementation, extensions of the modular sequences and personally planned learning activities were also reviewed by the college supervisor.

The third major role of the supervising classroom teacher emerged from both the ongoing general dialogue between the teacher and the student and the evaluative discussions linked to the supervisory summary sheets, namely the process of aiding the prospective teacher to move from a fragmented view of teaching as a series of isolated episodes in the day to day instructional program to a synthesis of thought concerning the complex totality of teaching within which the ultimate goal is the releasing of human potential within the learner.

In the design of the classroom supervisor's summary sheets the following two questions were considered: (1) Does the summary sheet focus upon significant aspects of student performance related to the stated competency-objectives? (2) Does the summary sheet have the potential to guide dialogue between the supervising teacher and the student into fruitful avenues of further personal professional development of the prospective teacher?

Each of the sixteen modules presented in Chapters IX, X, and XI include a supervisory summary sheet. Not only did data from these sheets serve as valuable sources of information in the evaluation of student progress throughout the program, the data was also used in the revision and refinement of the module clusters.

The Role of the Student

In none of the three major roles outlined above did the supervising teacher act independently of the student. Instead as a prospective teacher and decision maker the student remained actively involved in the implementation, evaluation, and synthesis of his personal professional learning experiences. As indicated by the learning activities included in the illustrative module clusters, the student supplemented direct field experiences with readings, seminars and lecture-discussion sessions, thus providing for linkage between theory and practice.

Over a year's time, the prospective teachers spent three and one-half to four days each week in the field setting. Requirements for the professional sequence were taken concurrently. However, class and seminar sessions which normally met at least once each week for a semester of fifteen weeks met bi-weekly over the full one-year period, thus providing time for the development of modules in the actual field setting.

Each student was encouraged to pace himself in carrying out a modular sequence. Within each module cluster he selected out those modules which for him were most meaningful as well as most applicable to his individual field setting.

Students were required to carry out modules in at least two content areas concurrently. For many students concurrent development of two or more modular sequences helped them to perceive that generic teaching competencies such as those included in the illustrative module clusters were indeed applicable to varying teaching-learning situations. It is important to note that each module cluster was conceived as centering around a generic teaching competency with the individual modules within the module cluster serving to develop enabling competencies basic to the stated generic competency.

Efforts to aid students to see teaching in its totality as impact upon the personal development of the individual learner continued throughout the program. However, as evidenced in the illustrative module clusters included in the following chapters students were given the opportunity to consider both teaching behaviors and pupil outcomes in the evaluation of teaching competency.

The Role of the College Supervisor.

For the college supervisor involved in a CBTE program the traditional role of instructor expands to become coordinator, consultant, and counselor to both college students and inservice cooperating-supervising teachers. Thus in implementing the modular sequences, the college supervisor held seminars and lecture-discussion sessions for students on a regularly scheduled basis. Individual student conferences scheduled every six or seven weeks focused on the student's perceptions of his own progress and his plans for future development of generic teaching competencies. Classroom supervising teacher summaries were also reviewed. In addition the college supervisor made frequent visits to the field setting which provided for additional student contact as well as communication with the supervising teacher. He also read student responses to individual modules commenting in writing whenever possible.

As indicated earlier, throughout the program, in all college supervisor-student contacts the prospective teacher was encouraged to conceptualize teaching wholistically, to think about teaching in terms of pupil outcomes, and to develop his own teaching style. Thus each module was broadly conceived to give the student wide latitude in carrying out the learning activities related to the competency-objectives, tailoring them to his own teaching-learning style.

College supervisor contact with the supervising classroom teacher again moved beyond the traditional formal and informal classroom visits to regularly scheduled two-hour bi-weekly class sessions which were devoted to evaluative discussions of the ongoing program and to the identification of teaching competencies needed to teach reading in the classroom settings represented

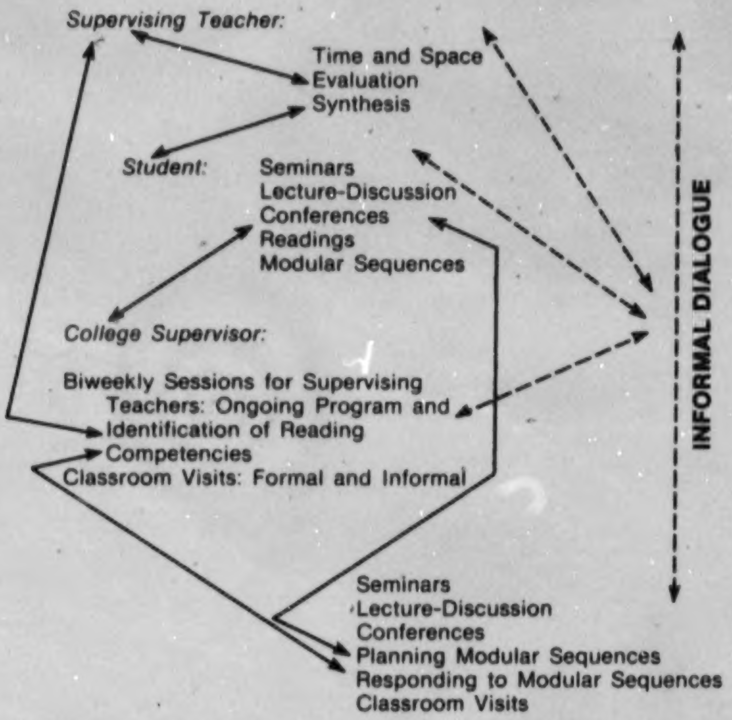
This inservice aspect of the program was considered by the supervising teachers as an important step in their own professional development. It was possible for them to receive either inservice or regular graduate credit. Further, the sessions served as a vital link in the ongoing communication between the school and the college with respect to the implementation of the total program.

Linkages among the roles of the supervising teacher, the student, and the college supervisor are summarized in Figure V.

As evidenced in the above discussion of the roles of college and school personnel input from resource personnel far exceeded requirements as generally associated with more traditional teacher education programs. However, only with such additional input can a program of CBTE be made truly individualized and personalized for the preservice teacher education student.

FIGURE V

Linkage Among the Roles of the Supervising Teacher, Student, and College Supervisor


Supervising Teacher:
Time and Space
Evaluation
Synthesis
Student:
Seminars
Lecture-Discussion
Conferences
Readings
Modular Sequences
College Supervisor:
Biweekly Sessions for Supervising Teachers: Ongoing Program and Identification of Reading Competencies
Classroom Visits: Formal and Informal
Seminars
Lecture-Discussion
Conferences
Planning Modular Sequences
Responding to Modular Sequences
Classroom Visits
INFORMAL DIALOGUE

NOTES

1. See Chapters IX, X, XI.
2. Corrigan, Dean, "Affiliated Schools and Research and Development Centers," *Partnership in Teacher Education*, Edited by E. Brooks Smith, Hans C. Olsen, Patrick J. Johnson, and Chandler Barbour, (Washington, D.C.: The American Association of Colleges for Teacher Education, 1966), p. 75.
3. Burdin, Joel L. and Lanzillotti Kaliopee, Editors, *A Readers Guide to the Comprehensive Models for Preparing Elementary Teachers* (Washington, D.C.: ERIC Clearinghouse on Teacher Education and the American Association of Colleges for Teacher Education, 1969), p. 281.

4. Partially funded by Faculty Research, Queens College, City University of New York.
5. Franc, Lillian, "Problems Perceived by Seventy-Five Beginning Elementary School Teachers," Available from the ERIC Clearinghouse on Teacher Education, ED 073 064. (Abstracted in Research in Education, 8:6, June 1973).
6. National Education Association, Research Division, "Profiles of the Metropolitan Teacher," *NEA Research Bulletin*, XL (October, 1962), p. 70.
7. Corrigan, Dean C., "The Future: Implications for the Preparation of Educational Personnel," *Journal of Teacher Education*, XXV:2 (Summer 1974), p. 101.
8. Item related to competency-objectives developed in Illustrative Module Cluster I: DIAGNOSIS IN THE TEACHING OF READING—Chapter IX.
9. Item related to competency-objectives developed in Illustrative Module Cluster II: ADAPTING INSTRUCTION TO INDIVIDUAL DIFFERENCES IN ORAL AND WRITTEN EXPRESSION—Chapter X.
10. Item related to competency-objectives developed in Illustrative Module Cluster III: ON EXPLAINING: A TEACHING STRATEGY IN THE SOCIAL STUDIES—Chapter XI.

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— IX —

ILLUSTRATIVE MODULE CLUSTER I: DIAGNOSIS IN THE TEACHING OF READING

Rationale: Item 29—Diagnosing Reading Difficulties

"Diagnosis . . . has little to do with grading, or passing or failing a child. Instead, its central concern is for the improvement of instruction through knowing about the particular needs of particular children."[1]

"Instructional diagnosis lies at the very heart of good teaching . . . Its significant function is a constant probing for the best way to move forward."[2]

"The term diagnosis includes (1) describing the individual's reading behavior as completely and specifically as possible, (2) noting the discrepancy between the individual's expected potential in reading and his actual level of performance and (3) determining probable causes and relevant correlates of his present reading performance."[3]

As indicated in each of the above quotations diagnosis is central to the teaching act and underlies prevention as well as remediation of reading difficulties. It makes possible individualized instruction by providing knowledge necessary for the selection of appropriate experiences for each student. It provides for the classroom teacher an indispensable tool for meeting specific needs of individual students; it serves to give purpose to the teaching-learning process.

In a study carried out by the writer 48.9 percent of the third-year teachers indicated that diagnosing reading difficulties presented a problem for them either most of the time or fairly often. The following instructional module cluster concerning classroom diagnosis in reading is offered as one way of helping teachers and prospective teachers develop competency in the diagnosis of reading difficulties.

GENERAL OBJECTIVES OF THE MODULE CLUSTER

The purpose of this module cluster is to increase the prospective teacher's understanding and skill with regard to classroom diagnosis in the teaching of reading. After completing this cluster the student should be able to (1) describe the reading behavior of individual pupils, (2) appraise the individual's approximate expected level of reading performance and to compare it to his actual performance and (3) determine probable causes of the pupil's present reading performance.

PREREQUISITES TO THE MODULE CLUSTER

This module cluster does not require prerequisite competencies of students other than those necessary for program entrance.

MODULES WITHIN THE MODULE CLUSTER

I. Defining Diagnosis
II. Informal Observation as a Background for Diagnosis
III. The Informal Interview as a Background for Diagnosis
IV. Pupil Records as a Basis for Diagnosis
V. Published Informal Tests as a Basis for Diagnosis
VI. Informal Teacher-Made Tests as a Basis for Diagnosis
VII. Standardized Survey Tests as a Basis for Diagnosis
VIII. Standardized Diagnostic Tests as a Basis for Diagnosis

DIAGNOSING READING DIFFICULTIES

I. Defining Diagnosis

Objective

The student will be able to define the meaning of the term "classroom diagnosis" as it pertains to both systematic evaluation and to evaluation as an integral part of the ongoing teaching-learning process. The student will be able to identify six general procedures to be used by the teacher in classroom diagnosis. Competence in these areas will be said to have been demonstrated when the prospective teacher is able to achieve a ninety percent correct response on the alternative form of the preassessment procedure.

Preassessment

Preassessment procedures consist of a pencil and paper test of the areas relevant to the stated objectives.

Instructional Activities

1. Read Chapter 16, *Teaching Them to Read* 2nd edition by Dolores Durkin, Allyn and Bacon, Inc., Boston, 1974.
2. Attend a seminar which will deal with the topic of the nature of reading.
3. Hold a conference with the cooperating teacher to discuss classroom diagnosis as it is carried on in actual practice in the given class setting.
4. List literature available to the classroom teacher with respect to diagnosis of reading (i.e., teachers' manuals, teachers' guides, etc.). For each reference include full bibliographic information and answer the following question: How did this reference add to your understanding of classroom diagnosis in reading?

Post Assessment

Post assessment procedures consist of alternative forms of the preassessment to be given after completion of all modules included in this module cluster.

Remediation

Remediation will be decided upon by the student together with his faculty advisor and cooperating teacher.

REFERENCES

Strang, Ruth. *Reading Diagnosis and Remediation.* EPIC/CRIER Reading Review Series. Newark, Delaware: International Reading Association Research Fund, 1968, pp. 1-10.

Durr, William K. Ed. *Reading Instruction: Dimensions and Issues.* Boston: Houghton Mifflin Company, 1967. Chapter 13.

PREASSESSMENT FOR MODULE CLUSTER

In a short paragraph define the meaning of diagnosis as it pertains to the teaching of reading. Include a statement of the purpose of diagnosis. Differentiate between systematic evaluation and ongoing evaluation.

List six procedures, both formal and informal, which can be used in diagnosis of reading:

a. ______________________________
b. ______________________________
c. ______________________________
d. ______________________________
e. ______________________________
f. ______________________________

SUPERVISORY SUMMARY

I. Defining Diagnosis
(to be completed with student)

Date and Supervisory Signature

1. The student has had a conference with the supervising teacher with respect to classroom diagnosis as it is practiced in the given classroom setting. ______________________

2. The student has listed references pertaining to classroom diagnosis in reading available to the teacher. Each reference is annotated as indicated in learning activity 4 in this module. ______________________

3. Supervisor's additional concerns and/or comments regarding any of the above.

DIAGNOSING READING DIFFICULTIES

II. Informal Observation as a Background for Diagnosis*

Objective

The student will work with a team of three or more fellow students to construct a partially structured observation guide, which will then be used by the student as an instrument in making an informal observation of the general reading habits and interests of at least one child. Competence in these areas will be said to have been demonstrated when the student will have used the observation guide to elicit information as to a child's general attitude toward books and reading and his particular play and reading interests.

Preassessment

None

Prerequisite

Completion of Module I (Defining Diagnosis) of this module cluster.

Instructional Activities

1. Attend a seminar related to the development of a partially structured observation guide.
2. Together with a team of three or more students construct a partially structured observation guide.
3. Use the observation guide to gather background information with respect to the general reading habits, attitudes and interests of a child.
4. Report the findings of your observations in outline form, using the observation guide to indicate major headings. Include in your report the answer to the following question:

    > How did this observation extend your knowledge, understanding and/or insight with respect to planning a reading program for this child?

Post Assessment

The student has used the partially structured interview guide to elicit information as to at least one child's general attitude toward books and reading and his particular play and reading interests.

Remediation

Remediation procedures would include those activities designed by the student in consort with his supervising teacher and/or faculty advisor.

SELECTED REFERENCES

Strang, Ruth, Constance M. McCullough and Arthur E. Traxler. *The Improvement of Reading*. Fourth edition. New York: McGraw-Hill Book Company, 1967. Chapter IV and XV.

*The student had the option of carrying out either Module II or Module III of this module cluster.

SUPERVISORY SUMMARY

II. Informal Observation as a Background for Diagnosis
(to be completed with student)

	Date and Supervisory Signature
1. Student has outlined his findings with respect to at least one child's general reading habits, attitudes and interests, using an observation guide developed with a team of three or more fellow students. Outline with supervisory comment is attached.	
2. Supervisor's additional concerns and/or comments regarding any of the above.	

DIAGNOSING READING DIFFICULTIES

III. The Informal Interview as a Background for Diagnosis

Objective

The student will work with a team of three or more fellow students to construct a partially structured interview guide which will then be used by the student as an instrument in carrying out an informal interview concerned with the general reading habits and interests of at least one child. Competence in these areas will be said to have been demonstrated when the student will have used the interview guide to elicit information as to a child's attitude toward books and reading, his play habits, his hobbies and his reading interests.

Preassessment

None

Prerequisite

Completion of Module I (Defining Diagnosis) of this module cluster.

Instructional Activities

1. Attend a seminar related to the development of a partially structured interview guide.
2. Together with a team of three or more students construct a partially structured interview guide.
3. Use the interview guide to gather background information with respect to the general reading habits, attitudes and interests of a child.
4. Report the findings of your interview in outline form, using the interview guide to indicate major headings. Include in the report the answer to the following question:

   How did this interview extend your knowledge, understanding and/or insight with respect to planning a reading program with this child?

Post Assessment

The student has used the partially structured interview guide to elicit information as to at least one child's attitude toward books and reading, his play habits and his reading interests.

Remediation

Remediation procedures would include those activities designed by the student in consort with his supervising teacher and/or his faculty advisor.

SELECTED REFERENCES

Strang, Ruth, Constance M. McCullough and Arther E. Traxler. *The Improvement of Reading*. Fourth edition. New York: McGraw-Hill Book Company, 1968. Chapters IV and XV.

SUPERVISORY SUMMARY

III. The Informal Interview as a Background for Diagnosis
(to be completed with student)

Date and
Supervisory Signature

1. Student has outlined his findings with respect to at least one child's general reading habits, attitudes and interests, using an interview guide developed with a team of three or more fellow students. Outline with supervisory comment is attached. ____________________

2. Supervisor's additional concerns and/or comments regarding any of the above.

DIAGNOSING READING DIFFICULTIES

IV. Pupil Records as a Basis for Diagnosis

Objective

The teacher-intern will be able to identify, summarize and synthesize data related to pupil development in reading included in pupil records. Competence in these areas will be said to have been demonstrated when the prospective teacher is able to write one or more paragraphs organizing the data secured from at least one pupil's cumulative record, identifying relevant entries and using the information to indicate patterns of pupil development related to growth in reading.

Preassessment

None

Prerequisite

Completion of either Modules I and II or Modules I and III of this module cluster.

Instructional Activities

1. Review the information available in at least one pupil's cumulative record. Refer to the following questions as you carry out your survey:
    (a) What entries, if any, deal directly with ability and/or achievement in reading?
    (b) What entries, if any, deal indirectly with ability and/or achievement in reading?
    (c) What entries, if any, refer to the pupil's attitude toward reading?
    (d) What information pertaining to emotional difficulties is given?
    (e) What physical difficulties that might influence growth in reading are noted in the record?
    (f) What standardized test results are entered on the pupil's record?
    (g) Can you trace an individual pattern of pupil development in reading based on the information available to you? If so, what pattern(s) do you perceive?

(h) What evidence can you give to substantiate your conclusions as outlined in (g) above?

2. Using the eight questions above as guidelines and adding any other information gleaned from the pupil's records, write one or more paragraphs organizing the data secured, indicating, if possible, patterns of pupil development related to growth in reading. Give substantiating evidence related to the patterns of pupil development you identify.
3. Hold a conference with your cooperating teacher to discuss the paragraph(s) you have written as outlined in number 2 above.

Post Assessment

The paragraph(s) summarizing and synthesizing the information available from at least one pupil's cummulative record will be acceptable to the cooperating teacher and/or faculty advisor.

Remediation

None. This is an optional module.

SELECTED REFERENCES

Dallmann, Martha and Roger L. Rouch, Lynette C.Y. Char and John J. DeBoer. *The Teaching of Reading*. Fifth edition. New York: Holt, Rinehart and Winston, Inc., 1978, Chapters 12, 13.

Holt, John. *How Children Fail*. New York: Pitman Publishing Corporation, 1964. Part II, "Fear and Failure," pp. 37-69; Part IV, "How Schools Fail," pp. 133-161.

SUPERVISORY SUMMARY

IV. Pupil Records as a Basis for Diagnosis
(to be completed with student)

Date and
Supervisory Signature

1. The student has written one or more paragraphs summarizing and synthesizing the data secured from at least one pupil's cumulative record, giving substantiating evidence related to patterns of pupil development. Summary with supervisory notation is attached. ____________________

2. Supervisor's additional concerns and/or comments regarding any of the above.

DIAGNOSING READING DIFFICULTIES

V. Published Informal Tests as a Basis for Diagnosis*

Objective

The student will be able to use informal tests published in a periodical, book, total reading program or graded series of reading paragraphs to determine the pupil's general level of comprehension and word recognition. Using the Betts formula the student will determine the child's various reading levels, including the independent, instructional, frustration and probable capacity levels. Competence in these areas will be said to have been demonstrated when the student will have ascertained the pupil's various reading levels to the satisfaction of the supervising teacher and/or faculty advisor and reported his findings on the attached Informal Diagnosis Blank.

Preassessment

None

Prerequisite

Completion of either Module I and II or Module I and III of this module cluster.

Instructional Activities

1. Attend a seminar related to the use of informal tests as a basis for diagnosis in reading.
2. From the materials available to you in your teaching setting, select those which you consider appropriate to carry out the objective(s) of this module.
3. Write out a short statement as to why you chose the material and how you plan to use it. Include in your plan your method of tallying errors in word recognition.
4. Confer with your supervising teacher with regard to your selection and plan.
5. Carry out the planned informal diagnosis with at least one pupil.
6. Use the attached Informal Diagnosis Blank to record your results.

Post Assessment

The student will have ascertained the pupil's various reading levels to the satisfaction of the supervising teacher and/or faculty advisor and reported his findings on the attached Informal Diagnosis Blank.

Remediation

Remediation will be decided upon by the student together with his supervising teacher and/or faculty advisor.

*Student had the choice of carrying out either Module V or Module VI of this module cluster.

SELECTED REFERENCES

Austin, Mary C. and Mildred H. Huebner. "Evaluating Progress in Reading Through Informal Procedures" in *Reading Instruction Dimensions and Issues.* William K. Durr, Ed. Boston: Houghton Mifflin Company, 1967. pp. 317-322.

Bond, Guy L. and Miles A. Tinker. *Reading Difficulties Their Diagnosis and Correction.* Second Edition. New York: Meredith Publishing Company, 1967. pp. 198-203.

INFORMAL DIAGNOSIS BLANK

Basic Data

Name ________________________ School ________________________

Chronological Age __________ Grade in School ______________

Date ________________________

Reading Levels—Please comment on each.

Independent reading level

Instructional reading level

Frustration reading level

Probable capacity reading level

Materials Used

Please give complete bibliographic reference including the grade level for each item.

SUPERVISORY SUMMARY

V. Published Informal Tests as a Basis for Diagnosis (to be completed with student)

	Date and Supervisory Signature
1. The student has written a short statement with respect to his choice of materials and plans for carrying out the objective of this module.	
2. The student has conferred with his supervising teacher with regard to the plan. The plan with supervisory comment is attached.	
3. The student has carried out the planned informal diagnosis with at least one pupil.	
4. The student has completed the Informal Diagnosis Blank. The Informal Diagnosis Blank with supervisory comment is attached.	
5. Supervisor's additional concerns and/or comments with regard to any of the above.	

DIAGNOSING READING DIFFICULTIES

VI. Informal Teacher-Made Tests as a Basis for Diagnosis

Objective

The student will be able to use a graded series of basic readers from which he will select successively more difficult passages to use in determining the pupil's various reading levels. Using the Betts formula the independent, instructional, frustration, and probable capacity reading levels will be ascertained. The student will formulate the questions needed for each selection in order to test comprehension. Competence in these areas will be said to have been demonstrated when the student will have ascertained the pupil's various reading levels to the satisfaction of the supervising teacher and/or faculty advisor and reported his findings on the attached Informal Diagnosis Blank.

Preassessment

None

Prerequisite

Completion of either Module I and II or Module I and III of this module cluster.

Instructional Activities

1. Attend a seminar related to the use of informal teacher-made tests as a basis for diagnosis in reading.
2. From the graded series of basic readers available to you in your teaching setting, select those which you consider appropriate to carry out the objective(s) of the module.
3. Write a short statement as to why you chose the material and how you plan to use it. Include in your plan the questions you will use with various selections and your method of tallying errors in word recognition.
4. Confer with your supervising teacher with regard to your selection and plan.
5. Carry out the planned informal diagnosis with at least one pupil.
6. Use the attached Informal Diagnosis Blank to record your results.

144

Post Assessment

The student will have ascertained the pupil's various reading levels to the satisfaction of the supervising teacher and/or faculty advisor and reported his findings on the attached Informal Diagnosis Blank.

Remediation

Remediation will be decided upon by the student together with his supervising teacher and/or faculty advisor.

SELECTED REFERENCES

Austin, Mary C. and Mildred H. Huebner. "Evaluating Progress in Reading Through Informal Procedures" in *Reading Instruction Dimensions and Issues.* William K. Durr. (ed.) Boston: Houghton Mifflin Company, 1967. pp. 317-322.

Bond, Guy L. and Miles A. Tinker. *Reading Difficulties Their Diagnosis and Correction.* Second Edition. New York: Meredith Publishing Company, 1967. pp. 198-203.

INFORMAL DIAGNOSIS BLANK

Basic Data

Name ____________________ School ____________________

Chronological Age __________ Grade in School __________

Date ____________________

Reading Levels—Please comment on each

Independent reading level

Instructional reading level

145

Frustration reading level

Probable capacity reading level

Materials Used

Please give complete bibliographic reference including the grade level for each item.

SUPERVISORY SUMMARY

VI. Informal Teacher-Made Tests as a Basis for Diagnosis (to be completed with the student)

	Date and Supervisory Signature
1. The student has written a short statement with respect to his choice of materials and plans for carrying out the objectives of this module including the questions formulated by the teacher-intern.	

2. The student has conferred with his supervising teacher with regard to the plan. The plan with supervisory comment is attached. ______________________

3. The student has carried out the planned informal diagnosis with at least one pupil. ______________________

4. The student has completed the Informal Diagnosis Blank. The Informal Diagnosis Blank with supervisory comment is attached. ______________________

5. Supervisor's additional concerns and/or comments with respect to any of the above.

DIAGNOSING READING DIFFICULTIES

VII. Standardized Survey Tests in Reading as a Basis for Diagnosis*

Objective

The teacher-intern will be able to use a standarized survey test in reading to determine the pupil's general level of comprehension and word recognition as evidenced by the scores of such a test administered to one or more pupils. After obtaining such scores, the teacher-intern will make an analysis of both correct and incorrect pupil responses by answering in writing questions included in learning activity number 7 of this module. Competence in these areas will be said to have been demonstrated when the student will have administered, scored and analyzed the results of the survey test in reading to the satisfaction of the supervising teacher and/or faculty advisor.

Preassessment

None

Prerequisite

Completion of either Module V or Module VI of this module cluster.

Instructional Activities

1. Attend a seminar focused on the use of standarized tests as a basis for diagnosis in reading.
2. Review pp. 497-506 in Durkin.
3. From the materials available to you in your teaching setting, select those which you consider appropriate to carry out the objective(s) of this module.
4. Write out a short statement as to why you chose the material and how you plan to use it.
5. Confer with your supervising teacher with regard to your selection and plan.
6. Administer and score the standarized survey test in reading.
7. Use the attached form to summarize your analysis of correct and incorrect pupil responses.

Post Assessment

The student will have administered, scored and analyzed the results of a standardized survey test in reading to the satisfaction of the supervising teacher and/or faculty advisor.

Remediation

Remediation will be decided upon by the student in consort with his supervising teacher and/or faculty advisor.

SELECTED REFERENCES

Bond, Guy L. and Miles A. Tinker. *Reading Difficulties Their Diagnosis and Correction*. Second Edition. New York: Meredith Publishing Company, 1967; pp. 183-237.

Strang, Ruth. *Reading Diagnosis and Remediation*. ERIC/CRIER Reading Review Series. Newark, Delaware: International Reading Association Research Fund, 1968; pp. 93-97.

*The student had the option of carrying out either Module VII or Module VIII of this module cluster.

ANALYSIS OF CORRECT AND INCORRECT PUPIL RESPONSES ON A STANDARDIZED SURVEY TEST IN READING

Basic Data

Name ______________________ School ____________________

Chronological Age _________ Grade in School ___________

Date ______________________

Test Data

Survey Test Used:
  Name ____________________________
  Form ____________________________
  Publisher _______________________
  Date ____________________________

Test Scores—Please list below:

Analysis

Please substantiate each answer. Use the reverse side if necessary.

1. What is the general pattern of error, if any? (i.e., repetition of a specific error, omission of items, predominance of error in specific dimensions of reading?) Answer this question for each dimension of reading included in this test.

2. How did this child's achievement in each dimension tested compare with each other?

3. What would you consider as this child's area of greatest strength in reading? Why?

4. In what area of reading do you believe this child needs strengthening? Why? Please be as specific as possible.

5. What additional information, if any, obtained from test results will help you to guide this child's individual program in reading?

SUPERVISORY SUMMARY

VII. Standardized Survey Tests in Reading as a Basis for Diagnosis (to be completed with student)

Date and Supervisory Signature

1. The student has written a short statement with respect to his choice of materials and plans for carrying out the objectives of this module. ____________________
2. The student has conferred with his supervising teacher with respect to the plan. The plan with supervisory comment is attached. ____________________
3. The student has administered and scored a standardized survey test in reading. ____________________
4. The student has completed the analysis of test results. (Form with supervisory comment is attached.) ____________________
5. Supervisor's additional concerns and/or comments with regard to any of the above.

VIII. Standardized Diagnostic Tests in Reading as a Basis for Diagnosis

Objective

The teacher-intern will be able to use a standardized diagnostic test in reading to determine the pupil's level of achievement in various dimensions of reading as evidenced by the scores of such a test administered to one or more pupils. After obtaining such scores, the teacher-intern will make an analysis of both correct and incorrect pupil responses by answering in writing questions included in learning activity number 7 of this module. Competence in these areas will be said to have been demonstrated when the student will have administered, scored and analyzed the results of the diagnostic test in reading to the satisfaction of the supervising teacher and/or faculty advisor.

Preassessment

None

Prerequisite

Completion of either Module V or Module VI of this module cluster.

Instructional Activities

1. Attend a seminar focused on the use of standardized tests as a basis for diagnosis in reading.
2. Review pp. 497-506 in Durkin.
3. From the materials available to you in your teaching setting, select those which you consider appropriate to carry out the objective(s) of this module.
4. Write out a short statement as to why you chose the material and how you plan to use it. List the dimensions of reading to be tested by this diagnostic test.
5. Confer with your supervising teacher with regard to your selection and plan.
6. Administer and score the standardized diagnostic test in reading.
7. Use the attached form to summarize your analysis of correct and incorrect pupil responses.

Post Assessment

The student will have administered, scored and analyzed the results of a standardized diagnostic test in reading to the satisfaction of the supervising teacher and/or faculty advisor.

Remediation

Remediation will be decided upon by the student in consort with his supervising teacher and/or faculty advisor.

SELECTED REFERENCES

Bond, Guy L. and Miles A. Tinker. *Reading Difficulties Their Diagnosis and Correction*. Second Edition. New York: Meredith Publishing Company, 1957; pp. 183-237.

Strang, Ruth. *Reading Diagnosis and Remediation*. ERIC/CRIER Reading Review Series. Newark, Delaware: International Reading Association Research Fund, 1968; pp. 93-97.

ANALYSIS OF CORRECT AND INCORRECT PUPIL RESPONSES ON A STANDARDIZED DIAGNOSTIC TEST IN READING

Basic Data

Name ____________________ School ____________________

Chronological Age __________ Grade in School __________

Date ____________________

Test Data

Diagnostic Test Used:

Name ____________________

Form ____________________

Publisher ____________________

Date ____________________

Test Scores—Please list below:

Analysis

Please substantiate each answer. Use the reverse side if necessary.

1. What is the general pattern of error, if any? (i.e., repetition of a specific error, omission of items, predominance of error in specific dimensions of reading?) Answer this question for each dimension of reading included in this test.

2. How did this child's achievement in each dimension tested compare with each other?

3. What would you consider as this child's area of greatest strength in reading? Why?

4. In what area of reading do you believe this child needs strengthening? Why? Please be as specific as possible.

5. What additional information, if any, obtained from test results will help you to guide this child's individual program in reading?

SUPERVISORY SUMMARY

VIII. Standardized Diagnostic Tests in Reading as a Basis for Diagnosis (to be completed with student)

Date and Supervisory Signature

1. The student has written a short statement with respect to his choice of materials and plans for carrying out the objectives of this module.
2. The student has conferred with his supervising teacher with respect to the plan. The plan with supervisory comment is attached.
3. The student has administered and scored a standardized diagnostic test in reading.
4. The student has completed the analysis of test results. (Form with supervisory comment is attached.)
5. Supervisor's additional concerns and/or comments with regard to any of the above.

POST-ASSESSMENT OF MODULE CLUSTER I: DEFINING DIAGNOSIS

I. If you were setting up a reading program for a child, for what purpose(s) would you use diagnostic procedures in reading?

II. What is the place of ongoing diagnosis and of systematic diagnosis in a reading program?

III. What specific diagnostic procedures would you use in designing a reading program for a child? Please explain the purpose of each diagnostic procedure you list.

NOTES

1. Durkin, Dolores, *Teaching Them to Read* (Boston: Allyn and Bacon, Inc., 1970), p. 405.
2. Wilheims, Fred T., "Evaluation as Feedback," *Evaluation as Feedback and Guide*, Fred T. Wilheims, Editor (Washington, D.C.: Association for Supervision and Curriculum Development, 1967), p. 6.
3. Bateman, Barbara, "Learning Disabilities, Yesterday, Today, and Tomorrow," *Exceptional Children*, 31; 1965, pp. 167-77.

—X—

ILLUSTRATIVE MODULE CLUSTER II: ADAPTING INSTRUCTION TO INDIVIDUAL DIFFERENCES IN ORAL AND WRITTEN EXPRESSION

Rationale: Item 17—Providing Learning Activities That Take Into Consideration Individual Rates of Learning

Children differ. This is a "given," substantiated by numerous studies on child development, whether focused on the mental, emotional or physical attributes of persons. "Providing for individual differences" has long been a slogan in literature concerned with the preparation of prospective teachers. Yet, writing as late as 1965, Gage states, "The problem of individualization is neglected in most research on teaching . . . We find little concern with the behaviors of teachers in attempting to cope with individual differences in the classroom."[1]

In his discussion of the need for promoting self-disciplined learning Peck cites the paucity of research on the effects of training teachers to understand individual children, but concludes that eventually through persistent and costly research a suitably complex map of the way to prepare different teachers effectively to individualize instruction will evolve—one that will match the complexities of the real world of the school.[2]

In the study of problems perceived by inservice teachers 48.9 percent of the third-year teacher-respondents perceived themselves as having a problem in providing for individual rates of learning as related to the ongoing teaching-learning process. In the context of the following module, concerned with adapting instruction to individual differences, *rate of learning* is linked to both achievement (as evidenced in school performance in written and oral expression) and rapidity of learning (as exhibited in the assimilation and practice of new concepts associated with oral and written expression).

GENERAL OBJECTIVES OF THE MODULE CLUSTER

The purpose of this module cluster is to (1) increase the teacher-intern's awareness of individual differences as exhibited by pupils both in the quality and quantity of oral and/or written expression in the language arts and (2) provide the teacher-intern with the opportunity to plan, practice and evaluate teaching procedures designed to accommodate variations in pupil achievement and rates of learning.

PREREQUISITES OF THE MODULE CLUSTER

This module cluster does not require prerequisite competencies of students other than those necessary for entrance into the program.

MODULES WITHIN THE MODULE CLUSTER

I. Identifying Individual Differences in Written and Oral Expression
II. Providing for Pupil Experience in Creative Writing or Speaking With Differentiated Follow-Up
III. Providing for Pupil Experiences in Creative Writing or Speaking Using Differentiated Procedures in Teaching Lessons Somewhat Similar in Content to Two Small Groups of Pupils With Varying Backgrounds of Achievement in Written and Oral Expression
IV. Evaluating Pupils' Oral and Written Expression

ADAPTING INSTRUCTION TO INDIVIDUAL DIFFERENCES IN ORAL OR WRITTEN EXPRESSION

I. Identifying Individual Differences in Written and Oral Expression

Objective

The student will be able to identify individual differences in pupils' written and oral expression as exhibited in the classroom setting through observation, analysis and comparison of samplings of pupils' oral and written expression. Competence in these areas will be said to have been demonstrated when the teacher-intern is able to make such analysis and comparison at a level acceptable to his cooperating teacher and/or faculty advisor.

Preassessment

None

Instructional Activities

1. List the names of three children in your class who appear to be least able to express themselves in writing and/or speaking. In a brief paragraph give evidence of the type of written expression these three children are capable of doing.
2. List the names of three children in your class who appear to be most able to express themselves in speaking or writing. In a brief paragraph give evidence of the type of oral or written expression these three children are capable of doing.
3. On the basis of your observation, analysis and comparison of oral and written expression for these six children, what conclusions can you draw with respect to teaching-learning activities involving written or oral communication for the children in your class group? List at least three conclusions with reasons why you have made these judgments.
4. Attend a seminar focused on the topic of individual pupil differences in written and oral communication.
5. Hold a conference with the cooperating teacher to discuss your conclusions with respect to teaching

learning activities involving written and oral communication for the six children you have listed in 1 and 2 above. Add any new ideas that result from this conference to your major conclusions as developed under number 3 above.

Post Assessment

The three major conclusions with respect to teaching-learning activities appropriate for the six children studied will be acceptable to the cooperating teacher and/or faculty advisor.

Remediation

Remediation will be decided upon by the student together with the cooperating teacher and faculty advisor.

ADDITIONAL REFERENCE

Dallmann, Martha. *Teaching the Language Arts in the Elementary School.* Second Edition. Dubuque, Iowa: Wm. C. Brown Company, Publishers, Chapters 1 and 2, 1971.

SUPERVISORY SUMMARY

I. Identifying Individual Differences in Written and Oral Expression
(to be completed with student)

Date and
Supervisory Signature

1. Student has written a descriptive paragraph concerning the written or oral expression of three children

who appear least able to express themselves in writing or speaking. Paragraph with supervisory comment is attached. ____________________

2. Student has written a descriptive paragraph concerning the written or oral expression of three children who appear to be most able to express themselves in writing or speaking. Paragraph with supervisory comment is attached. ____________________

3. Student has listed at least three conclusions with respect to teaching-learning activities involving written and oral communication for this class group and has given reasons for these conclusions. List with supervisory comment is attached. ____________________

4. Supervisor's additional concerns and/or comments regarding any of the above.

ADAPTING INSTRUCTION TO INDIVIDUAL DIFFERENCES IN ORAL OR WRITTEN EXPRESSION

II. Providing for Pupil Experience in Creative Writing or Speaking with Differentiated Follow-Up

Objective

The teacher-intern will plan and teach a lesson for a group of two or more pupils providing learning experiences leading to creative oral or written expression. The original plan will be extended to include differentiated follow-up activities based on the analysis of results of the previously taught lesson. Competence in these areas will be said to have been demonstrated when the teacher-intern is able to make appropriate follow-up pupil assignments at a level acceptable to his supervisory teacher and/or faculty advisor.

Prerequisite

Completion of Module I, Identifying Individual Differences in Written and Oral Expression.

Preassessment

None

Instructional Activities

1. Attend a seminar focused on criteria for differentiating follow-up assignments in oral or written expression.
2. Read portions of the following chapters that are applicable to the type of creative oral or written expression which you are carrying through with your pupils: Chapters IV, V, VI and XI in *Teaching the Language Arts in the Elementary School*, Second Edition, by Martha Dallmann.
3. Write out a plan for teaching a group of two or more children a lesson providing for learning experiences leading to creative oral or written expression. Confer with your supervising teacher with respect to your plan.
4. Teach the lesson as outlined in item 3 above.
5. Analyze results of this lesson and plan for differentiated follow-up learning activities for participating pupils.
6. Outline the differentiated follow-up activities and write a paragraph in which you give the reasons why you made the decision to differentiate follow-up learning activities as you did.
7. Confer with your supervising teacher with respect to follow-up learning activities.
8. Design your own additional instructional experiences.

Post Assessment

Plans for appropriate differentiated follow-up pupil learning activities designed by the teacher-intern based on the analysis of the results of the lesson taught by the teacher-intern are acceptable to the supervising teacher and/or faculty advisor.

Remediation

Remediation would be designed by the teacher-intern with his supervising teacher and/or faculty advisor.

SELECTED REFERENCE

Carlson, Ruth Kearney. *Sparkling Words: Two Hundred Practical and Creative Writing Ideas.* Berkeley, California: Wagner Printing Company. Distributed by National Council of Teachers of English, 1965, Chapters 1-4.

SUPERVISORY SUMMARY

II. Providing for Pupil Experience in Creative Writing or Speaking With Differentiated Follow-Up
(to be completed with student)

Date and Supervisory Signature

1. Student has written out a plan for teaching a group of two or more children a lesson providing for learning experiences leading to creative oral or written expression. Plan with supervisory notation is attached. ____________________
2. Student has taught the lesson as outlined in item 1 above. ____________________

3. Student has designed differentiated follow-up learning experiences for pupils which are acceptable to the supervising teacher. Outline of differentiated follow-up learning activities with supervisory comment is attached. ______________________

4. Student has written a paragraph concerning differentiation of follow-up learning experiences. ______________________

5. Supervisor's additional concerns and/or comments regarding any of the above.

ADAPTING INSTRUCTION TO INDIVIDUAL DIFFERENCES IN ORAL OR WRITTEN EXPRESSION

III. Providing for Pupil Experiences in Creative Writing or Speaking Using Differentiated Procedures in Teaching Lessons Somewhat Similar in Content to Two Small Groups of Pupils with Varying Backgrounds of Achievement in Written and Oral Expression

Objective

The student will be able to provide for pupil experiences in creative writing or speaking, using differentiated procedures of teaching lessons somewhat similar in context to two small groups of pupils with varying backgrounds of achievement in written or oral expression. Competence in this area will be said to have been demonstrated when the teacher-intern is able to adapt instruction to each of two groups so as to elicit

164

creative writing or speaking from at least seventy percent of the participating pupils at a level acceptable to the cooperating teacher and/or faculty advisor.

Prerequisite

Completion of Module I within this module cluster (Identifying Individual Differences in Written and Oral Expression)

Preassessment

None

Instructional Activities

1. Read selected portions of Chapters 4, 5 and 11 in *Teaching the Language Arts in the Elementary School,* by Martha Dallmann which pertain to your plans for the development of this module.
2. Attend a seminar focused on differentiation of teaching procedures so as to provide for varying backgrounds of achievement in oral or written expression.
3. Write out two plans for teaching two lessons somewhat similar in content to two different small groups of pupils with varying backgrounds of achievement in oral or written expression. Confer with your cooperating teacher with respect to your plans. Include a procedure for determining criteria for level of acceptance of pupil performance in creative oral or written expression satisfactory to the cooperating teacher.
4. Teach the two lessons as planned. Use a tape recorder to record your lessons if you find this helpful in developing your module.
5. Analyze the creative writing or speaking evidenced by the pupils in each group, using the criteria set up with your cooperating teacher. Write a paragraph about the results of your analysis. Attach this paragraph to your lesson plan.
6. Discuss the above analysis with your cooperating teacher. Together identify at least one personal future teaching goal based on the analysis of the results of these two lessons. Write out this future goal and attach it to your lesson plan.
7. Design your own additional instructional experiences.

Post Assessment

An acceptable level of performance will be said to have been demonstrated when the student is able to adapt instruction to each of two groups so as to elicit creative writing or speaking from at least seventy percent of the participating pupils at a level satisfactory to the cooperating teacher.

SELECTED REFERENCE

Leavitt, Hart Day and David A. Sohn. *Stop, Look, and Write! Effective Writing Through Pictures.* New York: Bantam Books, 1964.

SUPERVISORY SUMMARY

III. Providing for Pupil Experiences in Creative Writing or Speaking Using Differentiated Procedures in Teaching Lessons Somewhat Similar in Content to Two Small Groups of Pupils With Varying Backgrounds of Achievement in Written and Oral Expression

(to be completed with student)

	Date and Supervisory Signature
1. Student has written out two plans for teaching two lessons as outlined in Item 3, above. Plans with supervisory notations are attached.	
2. Student has taught the two lessons as planned to two groups of children with varying backgrounds of achievement in written and oral expression.	

3. Student has conferred with the cooperating teacher with respect to the analysis of the creative writing or speaking evidenced by the pupils as outlined in Item 5, above. ____________________

4. Student has written a paragraph about the analysis. Paragraph with supervisory comment is attached. ____________________

5. Student has identified at least one personal future teaching goal as outlined in Item 6, above. Summary of future goal with supervisory comment is attached. ____________________

6. Student has attained acceptance level of performance as outlined in the statement of the objective of this module. ____________________

7. Supervisor's additional concerns and comments regarding any of the above.

ADAPTING INSTRUCTION TO INDIVIDUAL DIFFERENCES IN ORAL OR WRITTEN EXPRESSION

IV. Evaluating Pupils' Oral and Written Expression

Objective

The teacher-intern will plan and evaluate a sequence of three learning experiences in creative writing or speaking for at least two pupils with varying backgrounds of achievement in written and/or oral expression. Competence in this area will be said to have been demonstrated when the teacher-intern will have developed and applied criteria for evaluation of creative writing and/or speaking to a sequence of three learning experiences for at least two pupils with varying backgrounds of achievement in written and/or oral expression at a level acceptable to the supervising teacher and/or faculty advisor.

Prerequisite

Completion of Modules I, II and III within this module cluster.

Preassessment

None

Instructional Activities

1. Read pp. 336-339 in *Teaching the Language Arts in the Elementary School* by Martha Dallmann.
2. Confer with your supervising teacher with respect to criteria and procedures for evaluation of pupils' creative writing and/or oral expression as carried out in the ongoing program in language arts.
3. Attend a seminar focused on the development and application of criteria for the evaluation of pupil written and oral creative expression.
4. Write out tentative plans for a sequence of three learning experiences in creative writing and/or speaking for at least two pupils with varying background of achievement in written and oral expression. (Plans may need to be adjusted during the sequence of learning experiences.) Include specific criteria for evaluation of pupils' creative endeavors.
5. Confer with your supervising teacher with respect to your plans.
6. Carry out the sequence of learning experiences.
7. Apply the criteria for evaluation of the sequence of learning experiences.
8. Write a paragraph describing the results of the evaluation of the learning sequence. Include answers to the following questions:

(a) What did you as a teacher learn (1) about the various children who participated and (2) about their achievement in written and/or oral expression?
(b) How did the results of the evaluation of this learning sequence influence your future planning for these children?
(c) Did the children participate in the evaluation? If so, how?
(d) How did the children react to the evaluative procedures?
(e) How would you change your evaluative procedures in the future? Why?

Post Assessment

An acceptable level of performance will be said to have been demonstrated when the teacher-intern will have developed and applied criteria for evaluation of creative writing and/or speaking to a sequence of three learning experiences for at least two pupils with varying backgrounds of achievement in written and oral expression at a level acceptable to the supervising teacher and/or faculty advisor.

SELECTED REFERENCES

Carlson, Ruth Kearney. *Sparkling Words: Two Hundred Practical and Creative Writing Ideas.* Berkeley, California: Wagner Printing Company, 1965. Chapter 5 and Appendix.

SUPERVISORY SUMMARY

IV. Evaluating Pupils' Oral and Written Expression
(to be completed with student)

	Date and Supervisory Signature
1. Student has conferred with supervising teacher with respect to ongoing evaluation procedures as carried out in the language arts program.	
2. Student has written out plans for a sequence of learning experiences as outlined in Item 4. Plans with supervisory notations are attached.	
3. Student has carried out the teaching-learning sequence.	
4. Student has written a paragraph describing results of the evaluation of the learning sequence as outlined in Item 8. Paragraph with supervisory comment is attached.	

5. Supervisor's additional concerns and comments regarding any of the above.

NOTES

1. Gage, N.L., "Research on Cognitive Aspects of Teaching." *Report of the Seminar on Teaching: The Way Teaching Is.* (Washington, D.C., Association for Supervision and Curriculum Development and the National Education Association), 1966, p. 39.
2. Peck, Robert F., "Promoting Self-Disciplined Learning: A Researchable Revolution," *Research in Teacher Education* ed. B. Othanel Smith (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1971), pp. 86, 95.

— XI —

ILLUSTRATIVE MODULE CLUSTER III: ON EXPLAINING, A TEACHING STRATEGY IN THE SOCIAL STUDIES

Rationale: Item 19—Explaining a Difficult Concept So Each Learner Will Understand

According to N. L. Gage, explaining comes close to the essence of instruction; so that when a teacher attempts to explain a process, concept or generalization he behaves more like a teacher than when he attempts to motivate pupils, promote discussion or maintain discipline.[1] Explanation may occur in teaching at all grade levels and in all content areas. However, as late as 1966, little research had been directly concerned with the teacher as explainer.[2] In a review of eight more recent studies of the ability to explain Rosenshine concludes that such studies have been primarily exploratory in nature, but that research on the ability to explain does represent a new and needed approach to the study of teaching.[3] Of the ninety-two third-year teachers responding to Item 19 in this study, 46.7 percent perceived the process of explaining a difficult concept to a group of children, so each learner would understand, as a problem for them either most of the time or fairly often. The ability to explain a concept is the focus of the following module.

GENERAL OBJECTIVES OF THE MODULE CLUSTER

The purpose of this module is to increase the prospective teacher's skill in explaining as defined by Gage—the engendering of comprehension of a process, concept or generalization—so that teacher-interns will be able to (1) explain to pupils the meaning of at least one key term needed in order to understand social studies material, (2) explain a concept related to the development of map and globe skills, (3) explain to pupils a concept(s) related to the interpretation of graphic materials such as a time line or bar graph and (4) engender comprehension of a major generalization related to one of the social science disciplines.

PREREQUISITE TO THE MODULE CLUSTER

The teacher-intern will attend a seminar focused on implementing thinking as an objective in social studies. Discussion of the following terms as used in relation to social studies will be an integral part of this experience: (1) process, (2) concept and (3) generalization.

MODULES WITHIN THE MODULE CLUSTER

I. Engendering Comprehension of Key Terms or Key Concepts
II. Engendering Comprehension of Concepts Related to the Development of Map and Globe Skills
III. Engendering Comprehension of Concepts Related to the Interpretation of Graphic Materials
IV. Engendering Comprehension of a Generalization Related to the Ongoing Social Studies Program

ON EXPLAINING: TEACHING STRATEGY IN THE SOCIAL STUDIES

I. Engendering Comprehension of Key Terms or Key Concepts

Objective

The teacher-intern will be able to explain (engender comprehension of) at least one key term or key concept related to the social studies material under discussion. Acceptance level of performance would be the eliciting of correct responses from sixty percent or more of the pupils. A pupil will demonstrate comprehension by using the term or concept correctly either orally or in written form, by responding correctly to a question including the term, by describing a personal experience related to the term, by giving the meaning of the term using his own vocabulary, or by any other procedure designed by the teacher-intern and/or cooperating teacher that gives evidence of mastery.

Prerequisite
None

Preassessment
None

Instructional Activities

1. Read pp. 78-114, 130-132 in *Social Studies for the Seventies*, second edition, by Leonard S. Kenworthy, Xerox College Publishing, Lexington, Massachusetts, 1973.
2. Write out a plan for teaching a key concept or key term related to the ongoing program in social studies and confer with your cooperating teacher with respect to your plan. Include a procedure for evaluating the effectiveness of your teaching with respect to engendering comprehension.
3. Teach one or more key terms or key concepts in social studies to a group of children. If possible use a tape recorder to record your lesson.
4. Tally the responses of participating pupils with respect to engendering comprehension of the key term or key concept being taught. Discuss results with your cooperating teacher. Attach this tally to your lesson plan.
5. Analyze your teaching procedures with your cooperating teacher. Identify at least three positive aspects of your lesson. In addition, identify at least one future teaching goal with respect to engendering comprehension of a key term or key concept in social studies. Attach your responses to your lesson plan.
6. Design your own additional instructional experiences.

Post Assessment

Acceptance level of performance will be a tally of correct responses for sixty percent or more of the participating pupils.

Remediation

Additional instructional activities intended to bring students to criterion level would be designed by the student in consort with his faculty advisor and/or cooperating teacher.

ADDITIONAL REFERENCE

Taba, Hilda. "Implementing Thinking as an Objective in Social Studies." *Effective Thinking in the Social Studies.* Thirty-Seventh Yearbook. Washington, D.C.: National Council for the Social Studies, National Education Association, 1967. Chapter 2, pp. 25-49.

SUMMARY

I. Engendering Comprehension of Key Terms or Key Concepts

(to be completed with student)

	Date and Cooperating Teacher's Signature
1. Student has written out a plan for teaching a key concept or key term in social studies and has included a procedure for evaluation of teaching effectiveness with respect to engendering comprehension. Plan with cooperating teachers notations is attached.	

2. Student has taught at least one key concept or key term to a group of children using if possible a tape recorder to record the lesson. ______________________________

3. Student has analyzed the lesson as outlined in Item 5, above. Analysis with cooperating teacher's comments is attached. ______________________________

4. Student has attained acceptance level of performance as outlined in the statement of the objective for this module. Tally with cooperating teacher's comment is attached. ______________________________

5. Additional concerns and comments regarding any of the above. ______________________________

ON EXPLAINING: TEACHING STRATEGY IN THE SOCIAL STUDIES

II. Engendering Comprehension of Concepts Related to the Development of Map and Globe Skills

Objective

Given an appropriate opportunity, the teacher-intern will be able to explain (engender comprehension of) at least one concept related to the development of map and globe skills. Acceptance level of performance would be eliciting of correct responses from sixty percent or more of the pupils.

A pupil will demonstrate comprehension by referring to the concept correctly in writing or speaking, by responding correctly to a question about the concept, by describing a personal experience exhibiting an understanding of the concept, by demonstrating the correct use of the concept when drawing a map or constructing a globe, or by any other procedure designed by the teacher-intern and cooperating teacher that gives evidence of mastery.

Prerequisite
None

Preassessment
None

Instructional Activities

1. Read pp. 133-140 in *Social Studies for the Seventies*, Second Edition, by Leonard S. Kenworthy. Xerox College Publishing, Lexington, Massachusetts, 1973.
2. Write out a plan for teaching a concept(s) related to the development of a map or globe skill. Include in your plan at least one pupil activity other than discussion and/or reading. Confer with your cooperating teacher with respect to your plan. Include a procedure for evaluating the effectiveness of your teaching as evidenced by pupil comprehension.
3. Teach one or more concepts related to map and globe skills to a group of children. Analyze your lesson in terms of pupils' responses (both correct and incorrect) using the evaluative procedure(s) set up by you and your cooperating teacher. State in what ways information gained from analysis will influence your own future teaching goals.
4. Design your own additional instructional experiences.

Post Assessment
Acceptance level of performance will be a tally of correct responses for sixty percent or more of the participating pupils.

Remediation
Additional instructional activities intended to bring students up to criterion level would be designed by the student with his cooperating teacher and/or faculty advisor.

ADDITIONAL REFERENCE

Joyce, Bruce R. *New Strategies for Social Education*. Chicago: Science Research Associates, Inc., 1972, pp. 366-384.

SUMMARY

II. Engendering Comprehension of Concepts Related to the Development of Map and Globe Skills

(to be completed with student)

	Date and Cooperating Teacher's Signature
1. Student has written out a plan for teaching a key concept(s) related to the development of map and globe skills as outlined under instructional activity number 2. Plan with cooperating teacher's notation is attached.	____________________
2. Student has taught at least one key concept related to the development of map and globe skills to a group of children.	____________________
3. Student has analyzed the lesson as outlined under instructional activity number 3. Analysis with cooperating teacher's comments is attached.	____________________

4. Student has attained acceptance level of performance. ______________________

5. Additional concerns and comments regarding any of the above. ______________________

ON EXPLAINING: TEACHING STRATEGY IN THE SOCIAL STUDIES

III. Engendering Comprehension of Concepts Related to the Interpretation of Graphic Materials

Objective

Given an appropriate opportunity, the teacher-intern will be able to engender comprehension of at least one concept related to the use of graphic materials. Acceptance level of performance will be the eliciting of correct responses from sixty percent or more of the pupils. The pupil will demonstrate comprehension by using the concept correctly either orally or in written form, by responding correctly to a question referring to the concept, by describing a past experience related to the concept, by explaining the concept using his own vocabulary or by any other procedure designed by the teacher-intern and cooperating teacher that gives evidence of mastery.

Prerequisite

None

Preassessment

None

Instructional Activities

1. Read pp. 125-127 in *Social Studies for the Seventies*, second edition by Leonard S. Kenworthy.

2. Review pp. 78-114 and 130-132 in *Social Studies for the Seventies* by Leonard S. Kenworthy, studying those portions pertaining to the development of this module.
3. Write out a plan for teaching a social studies concept related to the interpretation of graphic materials and confer with your cooperating teacher with reference to your plan. Include a procedure for evaluating the effectiveness of your teaching with respect to engendering comprehension.
4. Teach one or more concepts in social studies related to the interpretation of graphic materials to a group of children. If possible use a tape recorder to record your lesson.
5. Tally the responses of participating pupils with respect to engendering comprehension of the concept being taught. Attach this tally to your lesson plan.
6. Analyze your teaching procedures with your cooperating teacher. List at least two reasons (linked to teaching procedures) why participating pupils were able or unable to gain comprehension of the concept taught. On the basis of these results identify at least one personal future teaching goal. Attach your responses to your lesson plan.
7. Design your own additional instructional experiences.

Post Assessment

Acceptance level of performance will be a tally of correct responses for sixty percent or more of the participating pupils.

Remediation

Additional instructional activities intended to bring students to criterion level would be designed by the student in consort with his faculty advisor and/or cooperating teacher.

SUMMARY

III. Engendering Comprehension of Concepts Related to the Interpretation of Graphic Materials

(to be completed with student)

	Date and Cooperating Teacher's Signature
1. Student has written out a plan for teaching a social studies concept related to the interpretation of graphic materials in social studies and has included a procedure for evaluation of teaching effectiveness with respect to engendering comprehension. Plan with cooperating teacher's notation attached.	
2. Student has taught at least one concept related to the interpretation of graphic materials in social studies to a group of children using, if possible, a tape recorder to record the lesson.	
3. Student has analyzed the lesson as outlined in Item 6, above. Analysis with supervisory comment is attached.	
4. Student has attained acceptance level of performance as outlined in the statement of the objective of this module. Tally with cooperating teacher.	

5. Additional concerns and comments regarding any of the above. ____________________

ON EXPLAINING: TEACHING STRATEGY IN THE SOCIAL STUDIES

IV. Developing a Generalization Related to the Ongoing Social Studies Program

Objective

Given an appropriate opportunity, the teacher-intern will be able to guide the pupil(s) to the development of at least one basic generalization related to the ongoing social studies program. Competence in this area will be said to have been demonstrated when an appropriate generalization will have been developed and stated either orally or in writing by one or more pupils.

Prerequisite

Completion of at least one module in this module cluster.

Preassessment

None

Instructional Activities

1. Review pp. 19-33 in *Social Studies for the Seventies*, second edition by Leonard S. Kenworthy.
2. Write out a plan for guiding a child or group of children in the development of at least one basic generalization related to the ongoing social studies program. Include in your plan a statement of the basic generalization(s) you hope to elicit from the pupil(s). Also include at least one learning activity other than discussion and/or reading. Confer with your cooperating teacher with respect to your plan.

3. Carry out your plan. Then analyze results in terms of pupil ability to state a basic generalization, either orally or in writing, and answer the following questions:
   (a) What aspect(s) of your plan was (were) most successful in guiding the pupil(s) toward the development of a basic generalization?
   (b) How would you modify your plan if you were to carry it out again?

Post Assessment

Acceptance level of performance will be said to have been attained when the teacher-intern will have elicited an appropriate generalization from one or more pupils.

Remediation

Additional instructional activities intended to bring students up to criterion level would be designed by the student with his cooperating teacher and/or faculty advisor.

ADDITIONAL REFERENCE

Taba, Hilda and Mary C. Durkin, Jack R. Fraenkel, Anthony H. McNaughton. *A Teacher's Handbook to Elementary Social Studies: An Inductive Approach*. Reading, Massachusetts: Addison-Wesley Publishing Company, 1971; pp. 72-87.

SUMMARY

IV. Developing a Generalization Related to the Ongoing Social Studies Program

(to be completed with student)

	Date and Cooperating Teacher's Signature
1. Student has written out a plan for guiding a child or group of children in the development of a basic generalization as outlined under instructional activity number 2. Plan with cooperating teacher's notation is attached.	
2. Student carried out the plan with one or more children.	
3. Student has analyzed the plan as outlined under instructional activity number 3. Analysis with cooperating teacher's comments is attached.	
4. Student has attained acceptance level of performance.	
5. Additional concerns and comments regarding any of the above.	

NOTES

1. Gage, N.L., "An Analytic Approach to Research on Instructional Methods," *Phi Delta Kappan*, 49: 1968, pp. 601-606.
2. Gage, N.L., "Research on Cognitive Aspects of Teaching." *Report of the Seminar on Teaching: The Way Teaching Is*. (Washington, D.C.: Association for Supervision and Curriculum Development and the National Education Association), 1966, p. 41.
3. Rosenshine, Barak, "To Explain: A Review of Research," *Educational Leadership*, 26:3 (December, 1968), pp. 303-309.

PART III

Future Impact

CHAPTER XII

FOCUS ON THE FUTURE

— XII —

FOCUS ON THE FUTURE

Competency-based education is in its infancy. To predict how it will evolve and to envision its precise future is hardly possible. This chapter will review expanding conceptions of CBE followed by an overview of ongoing related research. The chapter will conclude with a discussion of possible future areas of emphasis in the evolving CBE movement and will suggest some developments which may strengthen CBE as its future opens before it.

EXPANDING CONCEPTIONS OF CBE: LINKAGE TO AREAS OTHER THAN PRESERVICE TEACHER EDUCATION

Expansion of CBE to areas of curricula other than preservice teacher education is evidenced in a number of institutions of higher learning. Schmieder, for example reports the following programs:[1]

Illinois State University	Social Studies
Maryland Institute of Art	Art
Ohio State Center for Vocational and Technical Education	Vocational Education
Teachers College, Columbia University	Language Arts
University of Alberta	Mathematics
University of Georgia	Science
Wayne State University	Industrial Arts

In addition, Schmieder also reports that the American Library Association through the School Library Manpower Project administers six experimental field-centered programs, models in the competency-based approach to school library-media education. This project is funded by a grant from the Knapp Foundation.

Linkage to Liberal Arts Programs

Several pilot programs related to competency-based education linked to the liberal arts component of undergraduate studies are included in the Change in Liberal Education Project, sponsored by five Washington-based educational associations: (1) the American Association of Community and Junior Colleges, (2) the American Association of State Colleges and Universities, (3) the American Association of University Professors, (4) the Association of American Colleges, and (5) the National Association of State Universities and Land Grant Colleges. This project is funded by a grant from the Carnegie Corporation of New York. Four programs specifically outline a competency-based element as an aspect of change in the liberal arts curricula.

Bowling Green State University has adopted a competency-oriented curriculum for undergraduates. It plans to certify students' general education requirements in terms of competency-based criteria. The university is working through the division for general studies and a center for competency-based undergraduate education to achieve two overall goals: (1) to define the general life skills needed by the individual and (2) to formulate a set of curricular options that would provide alternative tracks for fulfilling general educaton requirements.

Brigham Young University is working toward a competency-based program which will be administered by a general education council. The current mission of the council is to develop alternative means of evaluating student accomplishments. After January 1976, students are to complete "evaluations" rather than enroll in courses. Credit will be given as students complete various evaluations.

The College for Human Services in New York City is developing a competency-based professional program in human services. Among its major current goals is the training of faculty members in the implementation of the new program.

Governors State University in Illinois is an upper division institution for commuting students. It is developing a competency-based program in liberal education for older students whose goals in education are linked to ongoing careers.[2,3]

The concept of competency-based education linked to undergraduate liberal arts is also being given a thorough trial at *Alverno College*, Milwaukee, Wisconsin through funding from the Department of Health Education and Welfare, Fund for the Improvement of Post-Secondary Education. A brief description of this program which has been in operation since 1973 follows.

The Alverno program evolved over a period of several years starting in 1969 with an examination of the College Mission. Concern with such questions as "What do the disciplines really offer our graduates?" to "Can liberal education be defined in terms of outcomes it produces for students?" moved a concerned faculty toward the consideration of the concept of competencies that a liberally educated person ought to possess. Discussion, debate and compromise led to the identification of eight basic competencies each graduate of Alverno should possess upon completion of the liberal arts program of studies. The Alverno program requires that students perform specific tasks that reflect levels of competence. There are no grades and no credits, rather student progress is gauged in competence units. Entering students are video-taped and evaluated by a group of assessors including older students and members of the community as well as faculty. The college has not as yet devised all the ways it will "validate" competencies, but attention will be given both to the processes involved in the learning experience as well as to the content to be learned. Students have been assured that they will know what they will be able to do when they complete the forty competence units required for graduation from Alverno College.

One of the overall goals of the Fund for the Improvement of Postsecondary Education is to focus on new efforts to define competencies that transcend specific occupational roles both precisely and operationally. It would appear that Alverno College, heralded as one of the country's "prime practitioner of competency-based education" is indeed attempting to do just this.[4]

Linkage to Inservice Education

Where teacher certification renewal is based to some extent on the evaluation of demonstrated competency, as for example in the state of Washington, one might assume that CBTE will be extended beyond preservice to inservice teacher education programs. Yet most CBTE programs are currently focused on the preservice component of teacher education. However, extension of CBE to the inservice education of teachers is beginning to be given increasing attention in the literature. Two programs using CBE at the inservice level will be briefly reviewed here—one developed at the University of Georgia and the second at the Center for Vocational Education, The Ohio State University.[5,6,7]

The purpose of the Georgia program is to increase the effectiveness of supervising teachers who work with student teachers. It is specifically designed as an open learning system and utilizes the Combs' concept of "self as instrument."[8] The college staff and forty experienced supervising teachers worked together to identify basic assumptions from which the framework for the model was developed. The basic assumptions that evolved centered around five areas of design and implementation: (1) Identification of Competencies, (2) Preassessment, (3) Identification of Instructional Needs, (4) Establishment of Means for Attaining a Competency and (5) Assessment of Competency.

Twenty-two competencies in six major areas were agreed upon for use in the program which is largely carried out as a field-based program in conjunction with the supervision of students. The approach is highly individualized and personalized. The supervising teacher reviews the list of competencies to determine if, in his professional judgment, he is proficient in each of the given competencies. If for a given competency the answer is in the affirmative, the teacher establishes the competency assessment means and criteria which are later discussed with the college staff member working with the teacher. Evidences of the attained competency are agreed upon and then provided through use of audio or video tapes or discussion with the student teacher.

A similar procedure is worked out for competencies which the supervising teacher believes he is lacking. Learning experiences such as readings, module work, and group discussions are utilized—again selected by the teacher. Competency assessment is then agreed upon and verified.

The Georgia Inservice Model is unique in several respects. When moving through the model the teacher assumes the responsibility for self pre-assessment and the major responsibility for suggesting means of meeting identified needs. Thus one of the major objections of teachers, the fact that someone else usually preassesses, determines assessment criteria and judges whether or not a teacher exhibits a competency is eliminated. Further, teachers and college staff have an opportunity to capitalize on their combined professional efforts to develop competencies. The "open" model insures that the teacher is a *self* evaluator and provides opportunities to practice personal learning experiences with the support and assistance of other educators.

The performance/competency-based inservice program for teachers of vocational education at the Ohio State Center for Vocational Education is based on one hundred and eighteen Professional Vocational Teacher Education Modules. The modules were developed in cooperation with Oregon State University, University of Missouri, (Columbia) and their respective state departments of education. Prior research by Cotrell and others identified 384 vocational teacher professional performance elements which served as a base for the identification of the 118 modules in current use at the Center.[9]

Unique features of this program include (1) learning experiences which allow either individual or group instruction to be used, (2) module objectives focused on one or more competencies, (3) evaluation of demonstrated competence in an actual teaching situation, (4) students together with advisors select only those modules most appropriate for individual needs and (5) "situation specific" local materials may be incorporated into the modules.

Both inservice programs, the Georgia Inservice Program and The Ohio State Vocational Education Program, briefly described above have been specifically focused on helping the teacher function more effectively within his specific teaching situation. Both recognize the complexity of the teaching-learning situation which is further complicated by the very fact that in each program instructors are working with practicing adults who will change this practice only as they themselves perceive the need for change. It would appear that both programs provide for such involvement of the adult learner.

Linkage to Secondary and Elementary Curricula

The State of Oregon is the first to attempt competency-based curricula for secondary school students and plans to extend the concept to elementary schools. In 1972 the State Board of Education issued guidelines for establishing competencies but let individual school districts decide how they would implement them for the class of 1978. Ten general competencies under Personal Development, Social Responsibility and Career Development were mandated. Most school districts then developed specific competency-objectives and competency indicators. If a student fails to meet the minimum competencies by graduation he receives a certificate listing competencies achieved but is not awarded a high school diploma. Provisions for extended schooling are available if the student believes he can benefit from further study. Competence evaluation is usually based on the teacher's judgment but some school districts are experimenting with standardized written tests as supplements to teacher evaluation.

Teachers involved in the program feel that the new requirements are helping them to look more critically at the curriculum and to focus their attention on the student and what he really needs to know. Thus for the State of Oregon successes at the secondary level have spurred educators into making tentative plans to extend the concept of competency-based education to learning experiences for children at the elementary school level on a limited basis.[10]

RESEARCH IN CBE

Rosner and Kay point out that the long-range impact of CBTE on the nation's schools is not likely to be felt for at least ten years. Further, they maintain that the reason it will take that long is the need to upgrade the currently inadequate knowledge base concerning relationships between elements of the teacher education curriculum and indicators of pupil learning.[11] A dual line of research related to this basic need is currently in progress in several projects funded by the National Institute of Education. A two-pronged thrust is focused on (1) the linkage of teaching behavior to student learning and (2) problems of methodology related to doing such research.

Linkage of Teaching Behavior to Student Learning

Under contract with NIE the Far West Laboratory for Educational Research and Development is carrying out a series of experimental studies in which teachers are trained in skills needed for tutoring children in mathematics, guiding children's independent study, asking questions, and leading discussions of controversial issues. Teachers take a minicourse designed to foster one of the skills then work with students on lessons in which they practice the skill. Researchers observe the teachers using the specified technique and test students both before and after the teachers present the lesson. The project is expected to yield data that will give more information regarding the affect of specific teaching skills upon how much and how well students learn.

Two other NIE projects are making a study of how experienced teachers work with students in their classrooms and how the students respond to them. While data from these studies will not provide direct cause-and-effect information they will provide a base from which future studies testing correlations between teaching procedures and learning outcomes may be designed. The California Commission for Teacher Preparation and Licensing is conducting one of the studies. The second study is being carried out by the Research and Development Center for Teacher Education in Austin, Texas.

Designing and Conducting Research in Teacher Effectiveness

In addition both the California Commission study and the Far West Laboratory experimental studies are testing new ways to design and conduct research on teacher effectiveness. Also in this area the Center for Secondary Analysis at Northwestern University is exploring problems researchers encounter in the analysis and comparison of data from already completed studies. If this project is successful researchers will have available to them new techniques for the comparison of data from very differently constructed studies thus releasing sources of information not previously useable in the search for linkages between varying teaching competencies and pupil learning. Each of the NIE projects described above should help to provide the kind of knowledge that will yield information about teaching competencies and pupil learnings and thus strengthen the base for identifying teaching competencies to be included in the curricula of developing CBTE programs.[12]

The National Commission on Performance-Based Education, funded through a grant from the Rockefeller Brothers Fund is currently focusing on similar problems of research and development related to CBTE. The commission has identified four major research and development goals: (1) to develop a taxonomy of teaching behavior, (2) to develop a system for measuring teaching behavior, (3) to evaluate the effectiveness of training programs which educate for teaching competence and (4) to develop systems for evaluating the performance of graduates of C/PBTE programs.

In agreement with Rosner and Kay, and in line with the current research program being carried out by NIE, the Commission agreed that first priority must be given to research on teaching competence defined as those performances which significantly affect student learning. At the same time four different analytic strategies have been identified as starting points for the development of hypotheses to be tested by future research. Each of the four strategies linked to the hypotheses generating phase of the research program will be briefly described below.

Models of Teaching

In one research program several models of teaching are to be selected for study by experts who understand the particular models. In turn they will be charged with (1) the identification of the kinds of changes in students which should occur if they are instructed within the framework of a particular model and (2) the description of the kinds of teaching performance most likely to bring about these changes. Research designed to test the validity of the hypotheses generated from such an analysis will then be developed. It is proposed that from this line of research a taxonomy of teaching behavior will be evolved.

The Role of the Teacher

A second starting point will begin with different conceptions of the role of the teacher. Each role will be analyzed to describe (1) how teachers would perform who acted consistently with the concept of the role and (2) what consequences for students could be anticipated if teachers enacted the role. Again the analysis would be followed up by specific research to test the hypotheses generated by this second approach.

Curricula and Curricular Materials

Yet a third research program will focus on specific curricula and curricular materials. Information about what students are to learn if exposed to these curricula and what kinds of teaching performances are most likely to produce these changes will be sought.

Specific Pupil Performances

A fourth beginning strategy will be linked to the measurement of student performances and the identification of teachers who are more effective in producing these performances. The initial analysis will be followed by a study of the kinds of performances which characterize the more effective teachers. It is anticipated that together the four strategies outlined above should generate a variety of hypotheses about teaching performance and competence which will serve as a basis for further research.

The Commission has set for itself a comprehensive program to be carried out at selected Research and Development sites across the nation. It is anticipated that its work will be a major contribution in the evaluation and future development of the CBTE movement. However, the Commission also plans to work on competency-based education in other professions as well as teaching.[13]

FUTURE AREAS OF EMPHASIS

Three aspects of the CBE movement that will continue to receive particular attention as CBE programs become more fully operationalized will be discussed in the following section: (1) the study of models of teaching, (2) the role of consortia and advisory committees and (3) issues in teacher certification. While it would be possible to extend the above list almost indefinitely, the three areas have been selected as major concerns related both directly and indirectly to the implementation of the instructional program because as yet they have not received the attention they merit. They are concerns which will continue to have an impact on the shape of competency-based education programs of the future.

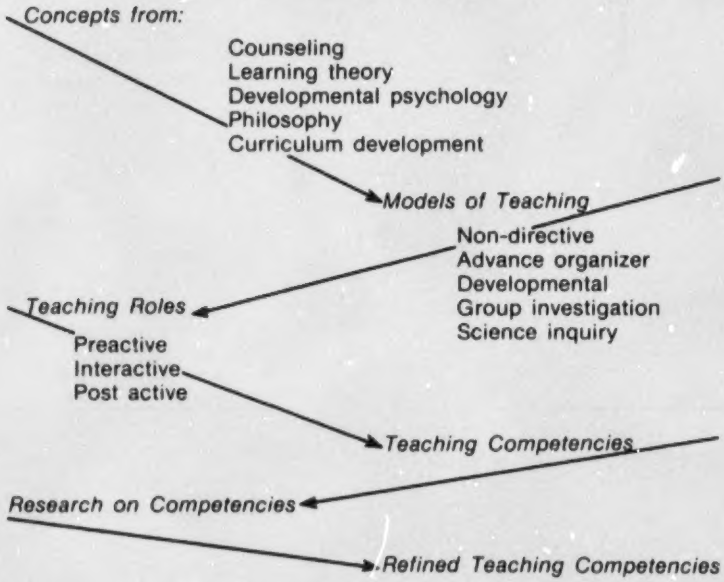
The Study of Models of Teaching

It is possible that as CBE moves into its second decade of development more attention will be given to the study of models of teaching as a basis for describing and clarifying the varying roles of the teacher. As pointed out by Joyce, Weil, and Wald, educational models can be used in three ways (1) the making of curriculum plans, (2) as guidelines for the teacher's interactions with students, and (3) as specifications for instructional materials.[14] All of these dimensions represent some aspect of the teaching act to be included in the overall description of the role of the teacher. In turn from such role conceptualizations competencies for teaching may be derived. Indeed if various models of teaching continue to be considered as a basis for conceptualizing the role of the teacher rich resources of thought from the works of counselors and therapists, learning theorists, developmental psychologists, and philosophers as well as curriculum projects and experimental schools become available to the designer of competency-based programs. The potential for a more comprehensive conceptualization of the role of the teacher from which in turn teaching competencies may be derived is extensive. As noted earlier the National Commission on Performance-Based Education has initiated a research program in which one of four starting points will be the study of models of teaching.

The following chart, "From Resources for Models of Teaching to Teaching Competencies" is intended to be illustrative rather than inclusive. Not all models of teaching are enumerated, not all resources for the conceptualization of models of teaching are included.[15,16]

FIGURE VI

Flow Chart: From Resources for Models of Teaching to Teaching Competencies


Concepts from:
Counseling
Learning theory
Developmental psychology
Philosophy
Curriculum development
Models of Teaching
Non-directive
Advance organizer
Developmental
Group investigation
Science inquiry
Teaching Roles
Preactive
Interactive
Post active
Teaching Competencies
Research on Competencies
Refined Teaching Competencies

The Role of Consortia and Advisory Committees

A variety of collaborative efforts functioning through consortia and advisory committees will continue to be a part of the CBE movement. However, thus far no single model has proved to be most effective. Rather as indicated by E. Brooks Smith and John Goodlad it will continue to be essential to plan for a gradual emergence of inter-institutional structure as individuals persuade others of need, allowing the structure to grow naturally and uniquely rather than planning for the building of a collaborative structure that does not fit and thus will never serve the purpose for which it is intended.[17]

Parity is a concept that will continue to be viewed as integral to collaborative decision making. However, it is important to note that while the Washington State *Guidelines and Standards* for certification call for parity of input among professional associations, school organizations and colleges and universities as they work together within the consortium structure, such collaboration in broad planning does not and will not imply parity in decision making throughout all aspects of the CBE program. Rather, as outlined in the previous chapter responsibilities within the consortium will need to be clearly assigned with feedback made available to participating organizations and agencies.[18]

New roles for persons associated with the consortium structure will continue to emerge. Feinberg, for example, cites the need for contact or liaison persons whose specific responsibility would be the articulation of the college-university program to the schools and the interpretation of school needs to the colleges and universities.[19] In addition, if as predicted by Drucker, tomorrow's schools must be both integrated into and integrators of the community such liaison persons working through the consortia may well serve as one of the major vehicles through which such integration may come about.[20]

While the exact form of the consortium of the future as associated with CBE cannot be completely envisioned, Schmeider and Holowenzak conclude that the consortium is potentially one of the most powerful instruments for educational change and improvement and that consortia could shift the boundaries of teacher education in such a way as to bring together the worlds of preparation and practice.[21]

Issues in Teacher Certification

A number of issues concerning the principal focus of teacher certification linked to CBTE will continue to demand the attention of educators. Whether teaching behavior or pupil outcomes or a combination of the two become the primary point of reference with respect to certification, questions such as the following included in Table V will need to be resolved.

TABLE V

Issues Concerning Principal Focus of Certification Requirements[22]

Teaching Behaviors	Pupil Outcomes
What teaching behaviors are teachers to be able to demonstrate?	What pupil learnings are to be evidenced?
What will be the criteria for effective performance of specified teaching behaviors?	If "successful" learning is to be situationally specific what would this mean for certification standards?
In what settings are teaching behaviors to be demonstrated? (Real-simulated; small group-large group?)	
In how many differing situations should a teaching behavior be demonstrated? (Age/grade level; grouping?)	With what kinds of children must a teacher demonstrate "successful" pupil outcomes? (Age/grade; multicultural?)
How much variance is acceptable in the performance of a given teaching behavior?	What variation in pupil outcomes is to be permitted?
What is the relationship between knowledge of content and terminal competencies to be demonstrated; between enabling competencies and terminal competencies?	What is the relationship between knowledge about such areas as pupil learning and teaching methods and ability to foster pupil learning?
How will teacher education programs be structured to meet the primary requirement of teacher certification demonstrated teaching behavior?	How will teacher education programs be structured to meet the primary certification requirement of specified pupil outcomes?

Three additional issues in teacher certification concern the question of two-tiered certification in support of cultural diversity, the role of the state in certification and the concept of extra-legal certification. Freeman argues for the need of a certifying system composed of licensure in two tiers. The first tier would provide for certification on the basis of demonstrated competence in a specific intellectual, vocational, or cultural area. The second tier would certify that a person has demonstrated competence to teach children in a specific kind of neighborhood or community. Further, the prospective teacher would be certified at the second tier on the basis of his capacity to benignly affect the achievement and well being of the children in a particular neighborhood or community. This suggests that the school system where the candidate intends to teach would need to assist the prospective teacher in his preparation for licensing at the second tier. Clearly two-tiered licensing proposes a combined teaching behavior/pupil outcome model as a basis for certification. How competence at this second level is to be assessed is yet to be determined. That administrators, peers, parents and community people would be involved in such assessment would appear to be essential. Freeman concludes that in order to benignly affect students "education must be consonant with the cultural milieu of the community in which the students live." Thus the two-tiered model for teacher certification as proposed by Freeman would be supportive of the cultural diversity characteristic of our multi-cultural society.[23] White in a discussion of CBTE in a multi-cultural society concludes that "PBTE is a model for teacher education with a great deal of potential for multicultural education."[24]

The role of the state with respect to setting standards for the certification of teachers continues to be a matter of concern for educators involved in the competency-based movement. Andrews points out that each state can be placed on a continuum from a low where the state's role is one of providing information about certification without making any judgments about certification, and indeed without issuing certificates, to a high where the state controls certification through direct control of three major areas. In the latter approach the state (1) establishes competencies, (2) sets the level for successful performance and (3) establishes its own assessment system. No state has taken either of these extreme positions. Instead there appears to be a trend toward a moderate middle ground stance of college-based approved programs. Most programs are field centered and have cooperative arrangements with a school system. However, program control remains in the hands of the college/university institution. The issue of the role of the state with respect to control of teacher education programs through the setting of standards of certification remains a crucial concern for all who are involved in the design and development of CBTE programs. Thus the AACTE Committee on Performance-Based Teacher Education urges that states adopt an experimental rather than a mandatory approach to PBTE.[25,26]

In certifying teachers completing a competency-based teacher education program William L. Smith suggests the use of extra-legal certification. Under such an approach certification could be determined by a special board of examiners and the certificate would be awarded in addition to regular certification. The concept appears to have some merit and for some states may be an avenue to be explored further. Several basic unresolved questions remain however, among them: Can a CBTE program also meet traditional certification requirements and be truly competency-based? How shall extra-legal governing boards be selected? For what competencies should extra-legal certification be awarded?[27]

IS CBTE A TRANSITIONAL MODEL?

Rosner and Kay refer to CBTE as a transitional model. The purpose of the transitional model is to move teacher education from its present "ambiguous" state to a more clearly defined program of professional education—education which ultimately is to be established upon a firm theoretical and empirical base.[28] Clearly, as new research techniques and assessment procedures are developed and applied to competency-based programs, instructional programs will be shaped and adapted to the results of such research. In this sense the CBTE model must be viewed as transitional.

Further, it would appear that the present CBTE model is transitional in that the search for the accommodation of the affective educational needs of prospective teachers as they experience the competency-based program will continue and accelerate. In a discussion of a humanistic approach to performance-based teacher education, Nash, for example, writes, "Perhaps PBTE will lead to a rehumanization of teacher education. . . . In particular we must ask what is happening to the human beings who are experiencing the program."[29] Combs argues against the apparent dichotomy with respect to behavioristic and humanistic approaches to understanding human beings. He affirms, "Humanism does not deny behaviorism. Instead it provides a valuable tool to deal with those problems the behavioristic approach is unable to handle so effectively and efficiently."[30] Writing of behavioral objectives and accountability in art education Eisner takes a similar stance and states, "I accept the idea that behavioral objectives can be useful in art education. What I object to is the failure to recognize their limitations and the consequential overemphasis of their importance."[31]

Thus as professional dialogue continues to center on the need for the total development of the prospective teacher, affective as well as cognitive, feelings and attitudes as well as behaviors, the shape of the instructional component of CBTE programs will indeed be changed.

Finally, if CBTE is to remain responsive to change in American society its status must be viewed as continuously in transition. Indeed if the potential of CBTE is to be realized one positive factor will be an inherent flexibility that permits it to remain responsive to our changing society.

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APPENDIX A

GLOSSARY OF TERMS

Accountability

The responsibility of educators to account for the effectiveness of their programs in terms of measurable outcomes. DeNovellis and Lewis differentiate between three related terms:[1]

1. *Fiscal Accountability:* the stringent planning and accounting for monies provided for educational programs.
2. *Instructional Accountability:* the evaluation of the instructional component of an educational program in terms of student outcomes.
3. *Program Accountability:* the comprehensive evaluation of a total educational program.

Competency-Based Teacher Education

A system of teacher education in which the overall purpose is to acquire specifically described concepts, skills and behaviors of teaching. As defined by Lindsey competency includes performance, knowledge, and values and teacher education refers to both the initial and continuing education of teachers.[2] In the literature the terms competency-based teacher education and performance-based teacher education are used interchangeably.

Competency-Objectives

A competency linked to a stated objective to be carried out under prespecified conditions and assessed by using previously described indicators. Competency-objectives may be described as:

1. *Enabling:* an intermediate competency-objective linked to a set of learning experiences which when integrated will promote achievement of the terminal competency-objective.
2. *Terminal:* competency-objective which specifies what the learner will be able to do at the conclusion of an instructional program.

Consortium

An association or union of institutions and/or persons for carrying into effect some operation requiring the sharing of resources.

Criteria

The standards of judgment used to test anything. Criteria used to measure student achievement in CBTE include the following:

1. *Knowledge criteria:* standards which require the demonstration of cognitive understandings.
2. *Performance criteria:* standards which require the demonstration of specified teaching behaviors.
3. *Product criteria:* standards which require the demonstration of a change in pupil behavior through teaching.

Generic Competency

A competency generally applicable to all teaching and frequently associated with terminal competency-objectives. (See Competency-Objective)

Module

A set of learning activities focused upon an element of teaching or learning whose end product is a specified competency.

Module Cluster

A group of related modules.

Parity

The concept of equality with respect to the amount, status and/or character of input in collaborative decision-making and planning.

Process-Product Studies

The research which attempts to investigate relationships between observed teacher behaviors and pupil outcomes.

Protocol Materials

Reproductions of classroom teaching and learning behaviors using films and tapes as well as the printed word. These are used to aid students in understanding concepts that make up the theoretical content of teacher education.

Summative Evaluation

A final assessment of product or process effectiveness in relation to pre-specified overall objectives.

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